

PATENT COOPERATION TREATY

17. -11- 2000

PCT

NOTIFICATION OF RECEIPT OF
RECORD COPY

(PCT Rule 24.2(a))

From the INTERNATIONAL BUREAU

To:

HÅMSØ, Eivind
 Håmsø Patentbyrå ANS
 P.O. Box 171
 N-4302 Sandnes
 NORVÈGE

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|---|---|
| Date of mailing (day/month/year) 07 November 2000 (07.11.00) | IMPORTANT NOTIFICATION |
| Applicant's or agent's file reference P 8935 | International application No. PCT/NO00/00319 |

The applicant is hereby notified that the International Bureau has received the record copy of the international application as detailed below.

Name(s) of the applicant(s) and State(s) for which they are applicants:

SANDVIK, Dag, Harald et al (all designated States)

International filing date : 28 September 2000 (28.09.00)
 Priority date(s) claimed : 29 September 1999 (29.09.99)
 Date of receipt of the record copy by the International Bureau : 20 October 2000 (20.10.00)
 List of designated Offices :

AP : GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW
 EA : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 EP : AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
 OA : BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 National : AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

ATTENTION

The applicant should carefully check the data appearing in this Notification. In case of any discrepancy between these data and the indications in the international application, the applicant should immediately inform the International Bureau.

In addition, the applicant's attention is drawn to the information contained in the Annex, relating to:

- time limits for entry into the national phase
- confirmation of precautionary designations
- requirements regarding priority documents

A copy of this Notification is being sent to the receiving Office and to the International Searching Authority.

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| Th International Bureau of WIPO 34, ch min des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35 | Authorized officer: Catherine Massetti Telephone No. (41-22) 338.83.38 |
|---|--|

PENT COOPERATION TREATY

Best Available Copy

PCT
NOTIFICATION OF ELECTION
(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE
in its capacity as elected Office

| | |
|--|--|
| Date of mailing (day/month/year) 27 June 2001 (27.06.01) | |
| International application No. PCT/NO00/00319 | Applicant's or agent's file reference P 8935 |
| International filing date (day/month/year) 28 September 2000 (28.09.00) | Priority date (day/month/year) 29 September 1999 (29.09.99) |
| Applicant SANDVIK, Dag, Harald et al | |

1. The designated Office is hereby notified of its election made:

in the demand filed with the International Preliminary Examining Authority on:

14 March 2001 (14.03.01)

in a notice effecting later election filed with the International Bureau on:

2. The election was

was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

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| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35 | Authorized officer Nestor Santesso Telephone No.: (41-22) 338.83.38 |
|---|---|

PATENT COOPERATION TREATY

-6.-7- 2001

PCT

INFORMATION CONCERNING ELECTED
OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

To:

HÅMSØ, Eivind
 Håmsø Patentbyrå ANS
 P.O. Box 171
 N-4302 Sandnes
 NORVÈGE

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| Date of mailing (day/month/year) 27 June 2001 (27.06.01) | | |
| Applicant's or agent's file reference P 8935 | IMPORTANT INFORMATION | |
| International application No. PCT/NO00/00319 | International filing date (day/month/year) 28 September 2000 (28.09.00) | Priority date (day/month/year) 29 September 1999 (29.09.99) |
| Applicant SANDVIK, Dag, Harald et al | | |

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

EP :AT,BE,CH,CY,DE,DK,ES,FI,FR,GB,GR,IE,IT,LU,MC,NL,PT,SE
 National :AU,BG,CA,CN,CZ,DE,IL,JP,KP,KR,MN,NO,NZ,PL,RO,RU,SE,SK,US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

AP :GH,GM,KE,LS,MW,MZ,SD,SL,SZ,TZ,UG,ZW
 EA :AM,AZ,BY,KG,KZ,MD,RU,TJ,TM
 OA :BF,BJ,CF,CG,CI,CM,GA,GN,GW,ML,MR,NE,SN,TD,TG
 National :AE,AG,AL,AM,AT,AZ,BA,BB,BR,BY,BZ,CH,CR,CU,DK,DM,DZ,EE,ES,FI,GB,
 GD,GE,GH,GM,HR,HU,ID,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MW,
 MX,MZ,PT,SD,SG,SI,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW

3. The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 39(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 36(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.

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| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35 | Authorized officer: Nestor Santesso Telephone No. (41-22) 338.83.38 |
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17 -4- 2001

PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

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| Date of mailing (day/month/year) 05 April 2001 (05.04.01) | | | |
| Applicant's or agent's file reference P 8935 | | IMPORTANT NOTICE | |
| International application No. PCT/NO00/00319 | International filing date (day/month/year) 28 September 2000 (28.09.00) | Priority date (day/month/year) 29 September 1999 (29.09.99) | |
| Applicant SANDVIK, Dag, Harald et al | | | |

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:
AU,KP,KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:
AE,AG,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,BZ,CA,CH,CN,CR,CU,CZ,DE,DK,DM,DZ,EA,EE,EP,ES,
FI,GB,GD,GE,GH,GM,HR,HU,ID,IL,IN,IS,JP,KE,KG,KZ,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,
MN,MW,MX,MZ,NO,NZ,OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,
The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).
3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on
05 April 2001 (05.04.01) under No. WO 01/23239

REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

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| The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland | Authorized officer J. Zahra |
| Facsimile No. (41-22) 740.14.35 | Telephone No. (41-22) 338.83.38 |

PATENT COOPERATION TREATY

PCT/IB/000/00373

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**NOTIFICATION CONCERNING
SUBMISSION OR TRANSMITTAL
OF PRIORITY DOCUMENT**

(PCT Administrative Instructions, Section 411)

From the INTERNATIONAL BUREAU

To:

HÅMSØ, Eivind
Håmsø Patentbyrå ANS
P.O. Box 171
N-4302 Sandnes
NORVÈGE

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| Date of mailing (day/month/year) 07 November 2000 (07.11.00) | | | |
| Applicant's or agent's file reference P 8935 | IMPORTANT NOTIFICATION | | |
| International application No. PCT/NO00/00319 | International filing date (day/month/year) 28 September 2000 (28.09.00) | | |
| International publication date (day/month/year) Not yet published | Priority date (day/month/year) 29 September 1999 (29.09.99) | | |
| Applicant SANDVIK, Dag, Harald et al | | | |
| <p>1. The applicant is hereby notified of the date of receipt (except where the letters "NR" appear in the right-hand column) by the International Bureau of the priority document(s) relating to the earlier application(s) indicated below. Unless otherwise indicated by an asterisk appearing next to a date of receipt, or by the letters "NR", in the right-hand column, the priority document concerned was submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b).</p> <p>2. This updates and replaces any previously issued notification concerning submission or transmittal of priority documents.</p> <p>3. An asterisk(*) appearing next to a date of receipt, in the right-hand column, denotes a priority document submitted or transmitted to the International Bureau but not in compliance with Rule 17.1(a) or (b). In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.</p> <p>4. The letters "NR" appearing in the right-hand column denote a priority document which was not received by the International Bureau or which the applicant did not request the receiving Office to prepare and transmit to the International Bureau, as provided by Rule 17.1(a) or (b), respectively. In such a case, the attention of the applicant is directed to Rule 17.1(c) which provides that no designated Office may disregard the priority claim concerned before giving the applicant an opportunity, upon entry into the national phase, to furnish the priority document within a time limit which is reasonable under the circumstances.</p> | | | |
| <u>Priority date</u> 29 Sept 1999 (29.09.99) | <u>Priority application No.</u> 19994728 | <u>Country or regional Office or PCT receiving Office</u> NO | <u>Date of receipt of priority document</u> 20 Octo 2000 (20.10.00) |

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| The International Bureau f WIPO 34, chemin des Col mbes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35 | Authorized officer Catherine Massetti Telephone No. (41-22) 338.83.38 |
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003639321

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

14

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| Applicant's or agent's file reference P 8935 | FOR FURTHER ACTION | See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) |
| International application No. PCT/NO00/00319 | International filing date (day month year) 28.09.2000 | Priority date (day month year) 28 09.1999 |
| International Patent Classification (IPC) or national classification and IPC7 B62B 3/14 | | |
| Applicant Sandvik, Dag Harald | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 3 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.
3. This report contains indications relating to the following items:
 - I Basis of the report
 - II Priority
 - III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV Lack of unity of invention
 - V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI Certain documents cited
 - VII Certain defects in the international application
 - VIII Certain observations on the international application

| | | |
|--|---|---|
| Date of submission of the demand 14.03.2001 | Date of completion of this report 21.06.2001 | |
| Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88 | Tel no: 177 78 9 EATOREG-S | Authorized officer Göran Carlström/j:s Telephone No. 08-782 25 00 |

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/NO00/00319

I. Basis of the report**1. With regard to the elements of the international application:*** the international application as originally filed the description:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

 the claims:

pages _____, as originally filed

pages _____, as amended (together with any statement) under article 19

pages _____, filed with the demand

pages _____, filed with the letter of _____

 the drawings:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

 the sequence listing part of the description:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.These elements were available or furnished to this Authority in the following language English which is: the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:** contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.**4. The amendments have resulted in the cancellation of:** the description, pages _____ the claims, Nos. _____ the drawings, sheet/fig _____**5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).****

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/NO00/00319

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

| | | | |
|-------------------------------|--------|-----|-----|
| Novelty (N) | Claims | 1-9 | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | 1-9 | YES |
| | Claims | | NO |
| Industrial applicability (IA) | Claims | 1-9 | YES |
| | Claims | | NO |

2. Citations and explanations (Rule 70.7)

The claimed invention is not considered to be anticipated by the patent documents cited. None of these documents reveals the device for a child seat described in the claims.

The invention according to claims 1- 9 is therefore considered to be new, to involve an inventive step and to be industrially applicable.

US 5651557 A (DE STEFANO)

US 4867464 A (COOK)

GB 2282572 A (REGENT MOULDINGS LIMITED)

US 5636818 A (EDWARDS ET AL)

US 5086960 A (SCHWIETZER)

DEVICE FOR CHILD SEAT IN A SHOPPER TROLLEY

This invention relates to a device for the child seat in a shopper trolley, where the child seat is pivotally supported in the area of the handle bar of the trolley, so that the 5 openings through the adjacent end piece form passages for the child's legs when the child seat has been pivoted into the trolley, into an approximately horizontal position, the shopper trolley preferably being of the type, which can be inserted partially into other shopper trolleys through an end 10 wall, which can be swung up, to allow stacking in the horizontal direction.

Child seats of the kind in question are not safe, since, by turning itself, the child can easily bring one foot up on the seat, from where it is easy to get up into a standing 15 position, or the child can remain lying on its knees on the seat. Such situations may easily result in the child falling to the floor. Fatal accidents and serious accidents resulting in permanent injuries have happened, caused by falls from the child seat of the shopper trolley.

The passages through the end piece of the shopper trolley nearest to the push handle bar/cross-bar cannot be restricted as such, because this would make it difficult, possibly impossible, to place a child's legs through the openings.

- 5 Therefore, these permanent passages should be wide and spacious insertion openings, which the child's legs can easily be put through and pulled out of later.

According to the present invention there has therefore been provided a safety device in the form of a transversal body 10 adjustable heightways, which is lowered, when the child's legs have been put through the passage openings of the end piece of the shopper trolley, from an upper idle stand-by position to a lower active securing position, wherein the safety body restricts the passage openings for the child's 15 legs heightways from the top. When this safety body is in one active lower securing position, this position may correspond to one of a number of different height positions depending on the thickness of the child's thighs. The safety body can thus be adjusted heightways and be fixed at the level set.

- 20 According to a particularly advantageous embodiment of the invention, the frame for the support of the safety bar has a plate-like holder at the top, which may be bent into shape from transparent plastic material, for example. In its active position, i.e. when the shopper trolley is not in the stacked 25 position, the upper surface of this plate-like holder element will face the person pushing the shopper trolley, and in a known manner the holder may contain information and/or advertisement and be provided with a clamp for the temporary fastening of a shopping list.

- 30 This information carrier may alternatively be directly

connected to the inwards/upwards pivotal end wall of the shopper trolley, and may be angled so at its top that its plate-shaped main element (the information-carrying part), sloping downwards/rearwards in the position of use, comes to rest, as the end wall is pivoted inwards/upwards, on or above the transversal handle.

The safety element, which may have a shape resembling a clothes' hanger, which can be adjusted heightways and can be fixed at different levels, may with advantage be secured to a vertically displaceable slide, which can be fixed in different positions of height, and which may have one or more projections or similar engagement means releasably engaging at least one rack oriented vertically, which engagement can be temporarily released when the slide with the safety element is moved upwards or downwards for the purpose of height adjustment. The slide with the safety element and the projection/projections/engagement means are preferably biased towards a position in order to establish and maintain the engagement of the rack(s) in the height position set, preferably by means of a helical spring inserted between the slide and a counter means, which is immovable in the cushioning directions (axial direction) of the spring, but displaceable upwards and downwards in the directions of displacement of the slide, said helical spring extending perpendicularly to the longitudinal direction of the rack(s). By subjecting the slide with the safety element to a pressure force centrally, directed opposite the back-springing direction of the helical spring, and in the axial direction of the spring, the spring is compressed and tightened, while at the same time the one or more protrusions of the slide are disengaged sideways from the respective tooth notch or notches of the rack(s), whereby at least one projection lands

in a vertical guide groove.

With the projection of the slide gliding displaceably in the guide groove, the slide with the safety element may be displaced up or down, with the slide in the condition pushed 5 in against the action of the compression spring, until the wanted height position of the safety element is reached.

The effective height position of the safety element will normally depend on the thickness of the child's thighs. When the child is to be removed from the child seat, the slide 10 with the safety element is pressed in against the action of the compression spring, so that said projection is brought out of engagement from a rack notch of the respective rack(s) and lands in the vertical guide groove, in order for the slide with the safety element to be pushed upwards into an 15 idle stand-by position.

Further objects, advantages and features of the invention will appear from the following description of a non-limiting example of a preferred embodiment, which is illustrated in the accompanying drawings, in which:

20 Fig. 1 shows a perspective view of a shopper trolley, in which the safety bar is shown, drawn in full lines, in its upper idle stand-by position, and in dotted lines, in one lower, active position;

Fig. 2 shows, in perspective, three stackable shopper 25 trolleys, stacked partly into one another in the horizontal direction;

Fig. 3 shows a partial perspective view of a shopper trolley, in which the "basket" of the shopper trolley is highly simplified;

Fig. 4 shows a front view of the safety device separately, 5 the transversal safety element having rounded, downward end portions;

Fig. 5, 5A and 6, 6A show partial perspective views and illustrate, seen at an angle from above, a simple height-adjusting device for the safety element (not shown),

10 Fig. 5 showing the projections of the slide, carrying the safety element, engaged in stationary vertical racks, which fix the position of the safety element, and have an intermediate guide groove for glidably receiving the projections of the slide carrying the safety element, for the 15 displacement of the safety element heightways;

Fig. 5A being a cross-section along the line V - V in Fig. 5;

Fig. 6 corresponds to Fig. 5 in all essentials, but here the projections of the slide have been disengaged from the notches of the vertical racks, one of the visible projections 20 thereby being positioned in the vertical guide groove located between the two racks forming a pair of racks, in order for the slide to be moved up or down relative to the position shown in Fig. 6; and

Fig. 6A is a section along the line VI - VI in Fig. 6.

25 Reference is made to Figs. 1 - 3, in which the shopper

trolley shown has an end wall 10 at a transversal handle bar 12. As appears more clearly from Fig. 3, the end wall 10 comprises two middle elements 10', 10'', essentially vertical, rod-shaped or tubular, each defining, together with an adjacent element 16', 16'' parallel therewith, near the side walls of the shopper trolley, represented by elements 18', 18'', and a horizontal element 20 included in the end wall 10, a through opening 14' and 14'' for the insertion of a child's leg.

10 In connection with these through insertion openings 14' and 14'' for a child's legs, there is pivotally suspended from the end wall 10 and a frame 23 movable relatively thereto, see in particular Fig. 1, a known child seat 22, which has an essentially horizontal position in its active position, as shown, and an essentially vertical idle position, not shown, when the frame 23 is pivoted to the end wall 10. The pivotal suspension of this child seat 22 is well known and therefore not shown in detail.

20 At its upper edge, the end wall 10 is pivotally supported on a horizontal axis (suggested through the longitudinal axis A-A of the transversal rod 21 in Fig. 1), so that it may swing up when shopper trolleys are being stacked, inserted partially one into the other horizontally, Fig. 2. By the preceding pivoting of the frame 23 towards the end wall 10, 25 the child seat 22 is pivoted into its idle position parallel to the frame 23 and the end wall 10, so that it does not interfere with the stacking.

30 Centrally in the upper portion of the end wall in question there is arranged, in accordance with the present invention, a child-securing device 24, which shall cooperate, in

principle, in an opening-restricting manner with the transversal element 20 of the end wall 10 in order to restrict these through openings 14', 14" after the child has put its legs through the openings, and is safely seated on
5 the seat 22.

The active element 24 of the child-securing device is bar shaped and extends essentially parallel with the end wall of the shopper trolley, and has downward end portions 24', 24", each joining the transversal main body at a transition
10 portion rounded convexly upwards/outwards.

The bar-shaped safety element 24 is suspended from the upper portion of the end wall 10, for example from the transversal rod 21.

To the middle rod-shaped/tubular elements 10', 10" of the end
15 wall, the stationary part 28 of the height-adjusting device of the safety element 24 is rigidly secured.

To the top of the frame tubes or similar of the shopper trolley, centrally at the end wall, there is attached, in a manner not shown in further detail, a depending narrow oblong
20 plate 26.

This stationary part 28 of the height-adjusting device for the safety element 24 cooperates with the vertically displaceable element of the height-adjusting device, which carries the safety element, and which can be fixed in the
25 set, adjusted height, and has the form of a slide 30 in the shape of a right-angled U, viewed horizontally.

The reference numeral 32 identifies a securing head for the safety element 24, 34 identifying an operating knob arranged in a central hole 32' in the securing head 32.

Fig. 4 shows that the stationary part 28 of the height-adjusting device 28, 30 of the safety element has racks 38a, 38b facing in opposite directions. From Figs. 5, 5A and 6, 6A it appears that each of these racks comprises a pair 38a, 38a' and 38b, 38b' of racks.

The operating knob 34 of the head 32 of the safety element is connected to one end of a compression spring in the form of a helical spring 40 arranged centrally, whose other end is secured centrally in a bowl-shaped slide piece 41 with securing means in the form of two sleeves 41' with internal threads for the reception of screws (not shown), which are screwed into the sleeves 41' through holes 32'' in the securing head 32, so that the parts 32 and 41 are immovable perpendicularly to the length of the tubes 10', 10'' of the end wall, but can be displaced along said length, so that said bowl-shaped slide piece 41 will form a counter element for the spring 40 by its compression, as a consequence of the pushing in of the operating knob 34.

From Figs. 4, 5, 5A, 6, 6A it will appear that the slide 30 is provided with four projections 42a, 42a' and 42b, 42b', facing each other in pairs, engaging respective notches of the racks 38a, 38a', 38b, 38b' in the fixed height position of the safety element 24, Figs. 4 and 5,.

By the pushing in of the operating knob 34 of the safety element 24 in the central hole 32' of the securing head 32 for the compression and tightening of the spring 40, whereby

the glide piece 41 of the spring 40 works as a counter element, thereby allowing the compression of the spring 40, the projections 42a, 42a', 42b, 42b' of the slide 30 are brought out of engagement from the notches of the racks 38a, 5 38a', 38b, 38b', Figs. 5A, 6 and 6A, whereby the slide piece 41 of the compression spring 40 together with the securing head 32 and the slide 30 can be displaced heightways up or down.

10 The push-in direction of the operating knob 34 is suggested by B in Fig. 5A. The push-in depth essentially corresponds to the width of one tooth or a projection 42a, 42a', 42b, 42b', which appears from Figs. 5A and 6A seen together.

15 According to Figs. 5 and 6, the part 28 of the height-adjusting and fixing device 28,30 of the safety element 24, which is stationary in the connected position of use, is formed like a U-clamp, i.e. with an elongate cross-section squeezed flat horizontally, which has an insertion opening 44 between the vertical racks 38a, 38a', from where a slot 46 extends vertically through and across most of the horizontal 20 dimension of the part 28, ending in a rounded inner portion 46'. Such a part 28, shaped like a U-clamp, may be slipped over/clamped onto the two middle rod-shaped or tubular elements 10', 10" of the shopper trolley end wall 10, and be secured thereto.

25 Between the racks 38b and 38b' of the pair 38b,38' of racks, there is formed a vertical guide groove 48 for one projection 42b' of the slide 30, whereas the second projection 42b slides, bearing externally on the rack 38b, when the slide 30 with the safety element 24 is displaced up or down, and the 30 spring 40 is compressed. In their secured position in the

position of use, the racks 38a and 38a' of the pair 38a,38a' of racks will enclose a corresponding vertical guide groove formed by the insertion opening 44.

5 The safety element 24 shaped like a clothes hanger with two arms 24', 24" of a downward concave shape, will essentially come to bear lightly on the child's thighs, so that the child cannot get up when the safety element 24 has been set in the correct position heightways.

10 The upper end of said upper plate 26 is connected to a support element 50 attached round the upper rod-shaped/tubular element 21 of the end wall 10 of the shopper trolley. The support element 50 carries a so-called information carrier 52 for advertisements etc., whose effective face 52' is oriented in a slope from its top 15 downwards, rearwards, i.e. towards the person pushing the shopper trolley in front of himself/herself, so that he/she can easily see the information, advertisement etc., without having to look away from the child sitting on the seat 22, secured with the safety element 24 across its thighs, Fig. 3.

20 Fig. 2 shows three shopper trolleys pushed partially into one another, provided with safety elements 24 with height-adjusting and fixing device and information-carrier 52 which are pivoted together with the end wall 10 when this is influenced by another trolley being pushed in.

25 The plate-shaped main element 52' of the information carrier 52, extending downwards/rearwards from its top, forms a free, outer part of an angled or bent plate body consisting of three or four plate-shaped portions arranged at such angles relative to one another, that when the end wall 10 swings

up/in as the shopper trolleys are being stacked in a horizontal row, Fig. 2, the plate-shaped main element 52' of the information-carrier 52, comes from above to rest in front of the transversal handle 12. Such information-carriers 52 5 can be connected directly or indirectly to the pivotal end wall 10 of the shopper trolley through the safety device.

The invention is not limited to the particular height-adjusting/fixing device shown for the safety bar 24, as other interlockable/releasable, displaceable or telescopic devices 10 may be used, wherein the securing of the individual positions can be stepped or infinitely variable. A safety bar 24, with a spring or a telescopic cylinder arranged thereto, exerting a constant light pressure across the child's thighs, can also be used.

C l a i m s

1. A device for a child seat in a shopper trolley, wherein the child seat (22) is suspended from one side wall (10), which can preferably be swung into/up in the shopper trolley about an upper horizontal axis, when shopper trolleys are being stacked horizontally, and wherein the child seat (22) is placed adjacent to openings (14', 14") for the child's legs through said end wall (10), said openings (14', 14") being defined at the bottom and at the sides by elements (10', 10", 16', 16", 20) included in said end wall (10), characterized in that in the area of said openings (14', 14") through the side wall (10) for the child's legs, the child seat (22) has an over-lying safety element (24) arranged thereto, which is adjustable heightways and can preferably be fixed in the set height position, and which is arranged to restrict the openings (14', 14") when lowered.
2. A device according to claim 1, characterized in that said safety element (24), which can be adjusted heightways and preferably be fixed/locked at the level set, has a shape resembling a clothes hanger consisting of a middle main body (24) essentially transversal, which merges through downward concave intermediate portions into downward end portions (24', 24").
3. A device according to claim 1, wherein the trolley is provided with a plate-like information-carrier (52), characterized in that the plate-like

information-carrier (52), which is connected directly or indirectly to the pivotal end wall (10) of the shopper trolley, and which comprises in the position of use a main element (52') sloping from its top rearwards, and from the upper edge thereof, a plate section sloping forward and being connected to the carrying section, configured and positioned in such a manner that the angled upper part of the information carrier (52), consisting of said main element (52') and the plate section, is pivoted so, as the end wall (10) pivots when two or more shopper trolleys are being stacked into a horizontal row, that said plate-like main element (52') comes from above to rest on or above the transversal handle (12).

15 4. A device according to claim 3, characterized in that at its top the stationary part (28,26) of the height-adjusting/fixing device (28,26,30) of the safety element (24) is connected to the lower supporting part of said information-carrier (52).

20 5. A device according to claim 3, characterized in that the stationary part (28,26) of the height-adjusting and fixing device (28,26,30) of the safety element (24) comprises at least an essentially vertical rack (38a, 38a', 38b, 38b'), and that the safety element (24) is connected to a slide, carriage or similar (30) displaceable in the vertical direction between an upper, idle stand-by position, in which the safety element (24) does not restrict said through openings (14', 14'') for the legs heightways, and several active positions below, these position depending on the thickness of the child's thighs, said slide (30) being formed with at least one

projection (42a, 42a', 42b, 42b'), arranged to engage, in one position of the slide/safety element in the longitudinal direction of the shopper trolley, a notch of said at least one rack (38a, 38a', 38b, 38b'), whereas in another position of the slide/safety element in the longitudinal direction of the shopper trolley, it is pushed sideways out of said engagement, whereby nothing prevents the slide/safety element (30/24) from being displaced up or down essentially in the vertical direction.

6. A device according to claim 5, characterized in that the slide (30) with the safety element (24) is spring-biased (40) towards their non-displaceable position, in which the projections (42a, 42a', 42b, 42b') of the slide (30) are engaged in a notch (notches) of said rack(s) (38a, 38a', 38b, 38b').

7. A device according to claim 6, characterized in that in the area of said rack, there is arranged a pair (38b, 38b') of racks with an intermediate guide groove (48) for one projection (42b') of the slide (30), and that the slide (30) with the safety element (24) cooperates with a spring (40), which seeks to retain the slide (30) in a position conditioned by the projection (42a, 42a', 42b, 42b') thereof being engaged in a notch of the racks (38a, 38a', 38b, 38b').

8. A device according to claim 7, characterized in that the stationary part (28) of the height-adjusting/fixing device of the safety element (24), carrying the racks (38a, 38a', 38b, 38b'), is formed like a U-shaped clamp with a horizontally elongate

vertical slot (46) therethrough, which extends over more than half the width (horizontal extent) of the U-clamp (28), it being possible for said U-clamp (28) to be passed over/clamped onto the end wall elements (10', 10") of the shopper trolley.

- 5
9. A device according to any one of the preceding claims 7 and 8, characterized in that in the area of each pair (38a,38a' and 38b,38b') of racks the slide (30) has two parallel projections (42a, 42a', 42b, 42b') to be engaged in one rack each, and that the notches 10 each have a length essentially corresponding to the corresponding width of the intermediate guide groove (44, 48), again corresponding to the distance of displacement of the slide (30) perpendicularly to the 15 longitudinal direction of the racks.

1/6

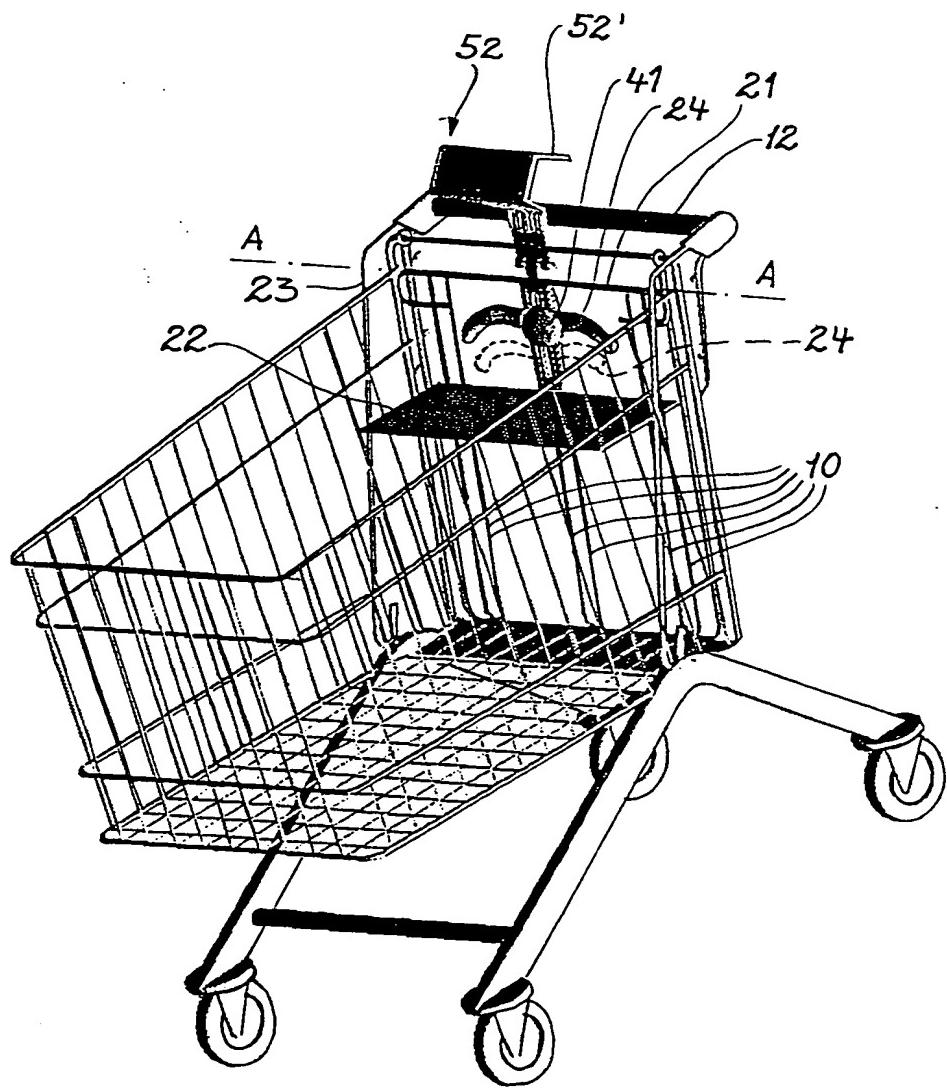


FIG. 1

2/6

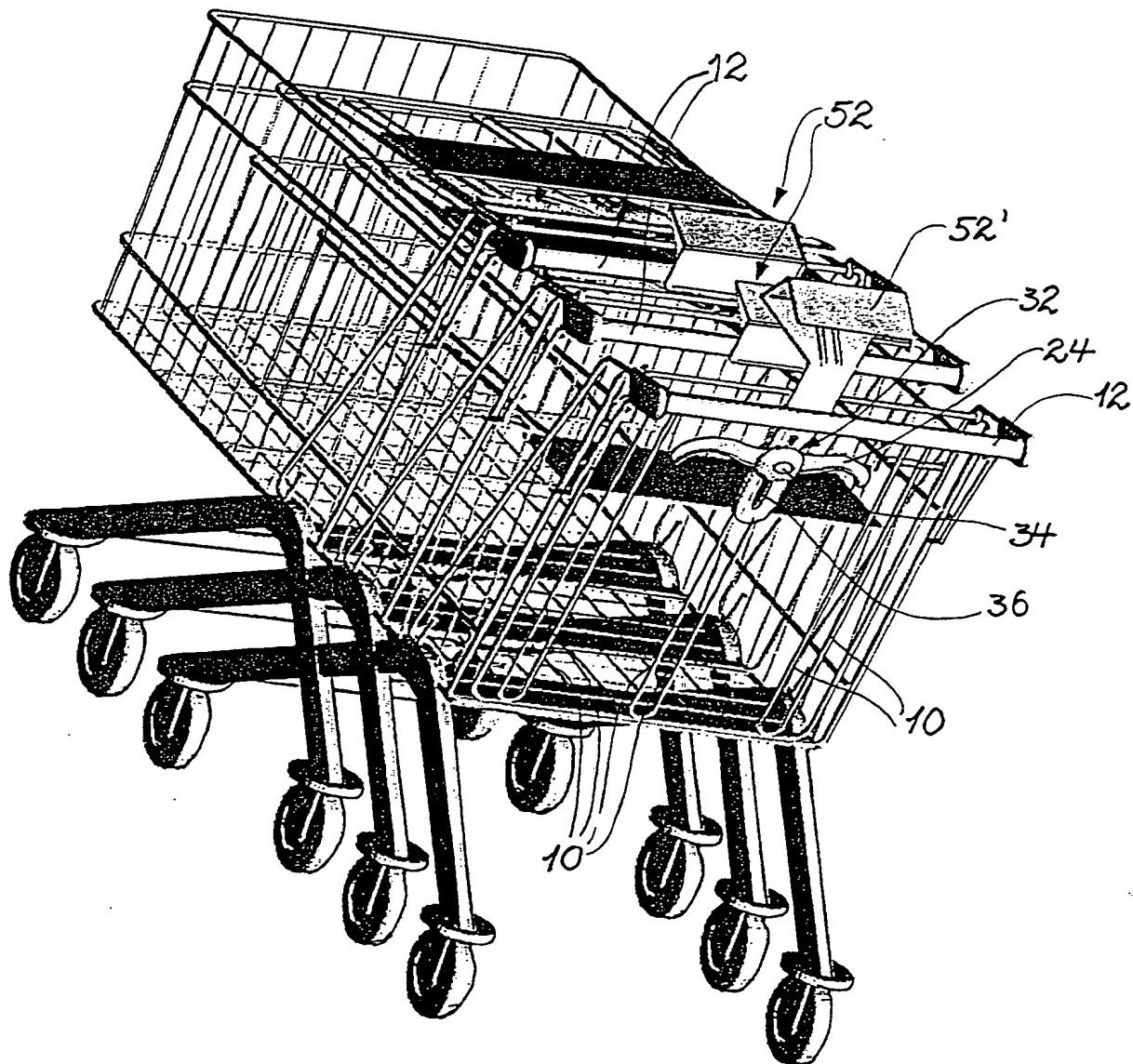


FIG.2

3/6

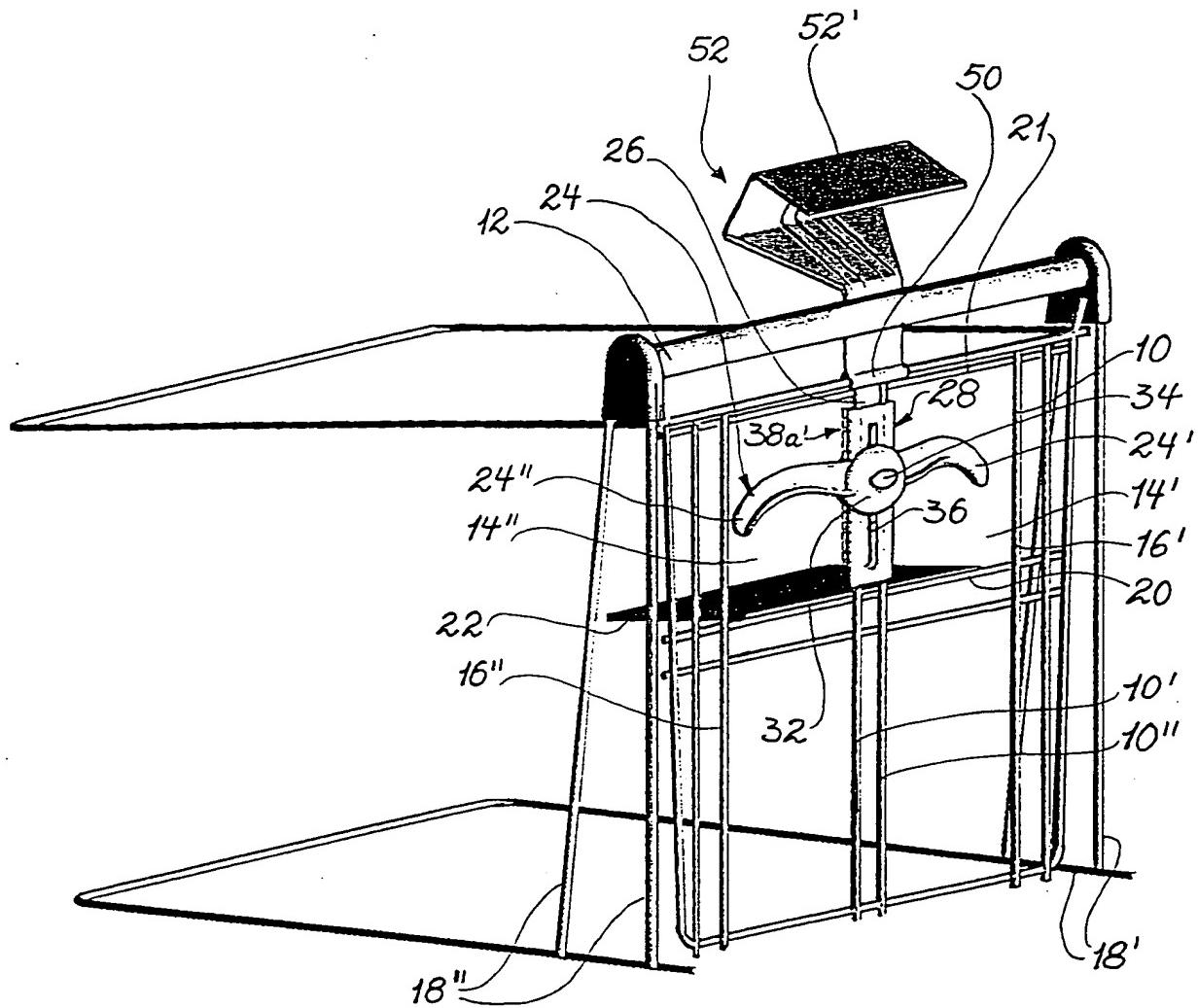


FIG. 3

4/6

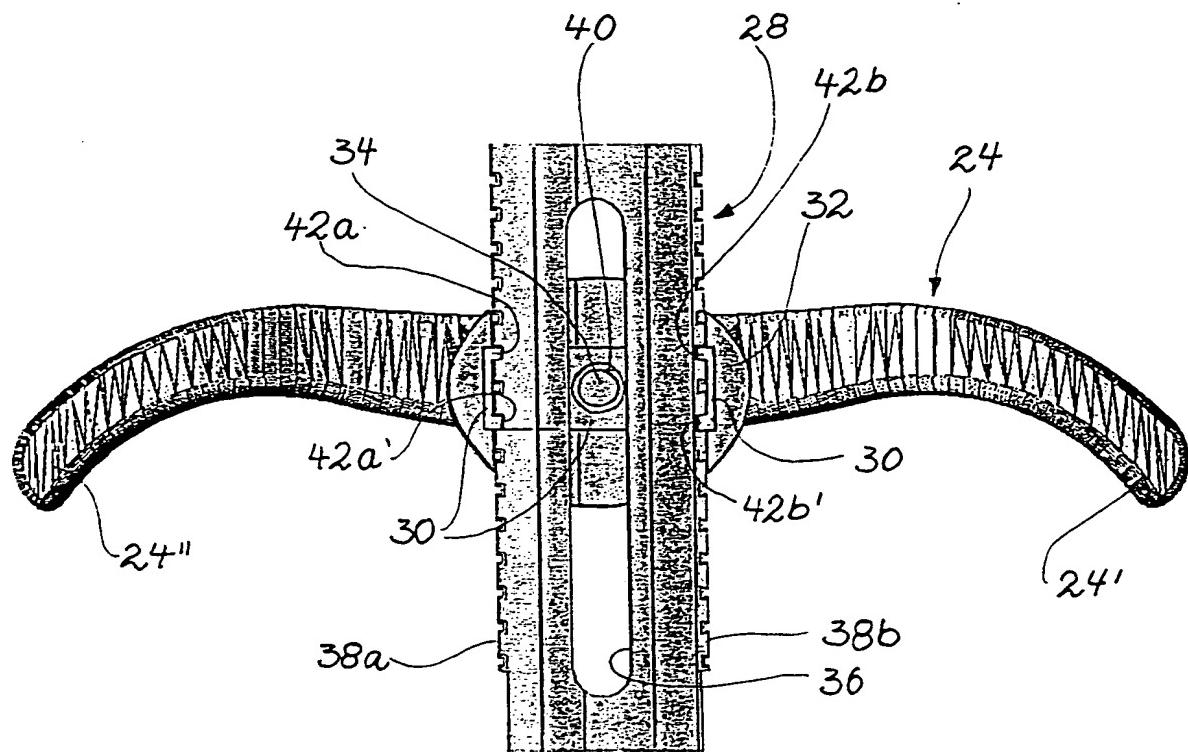
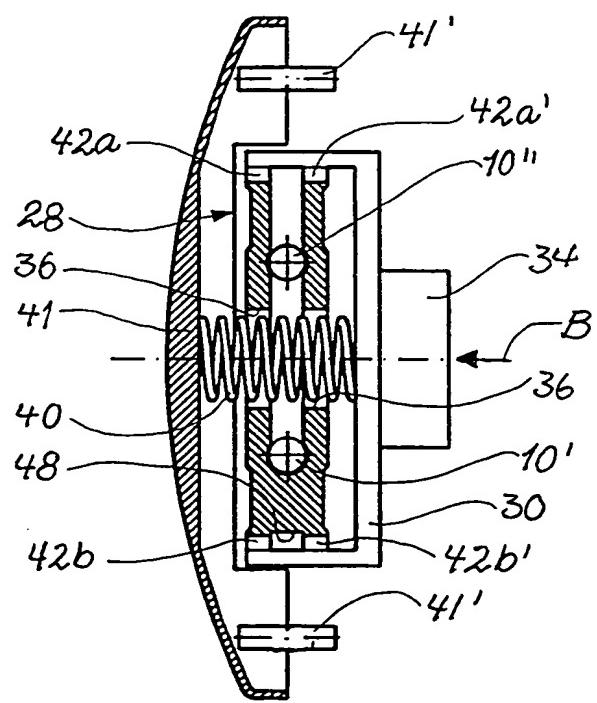
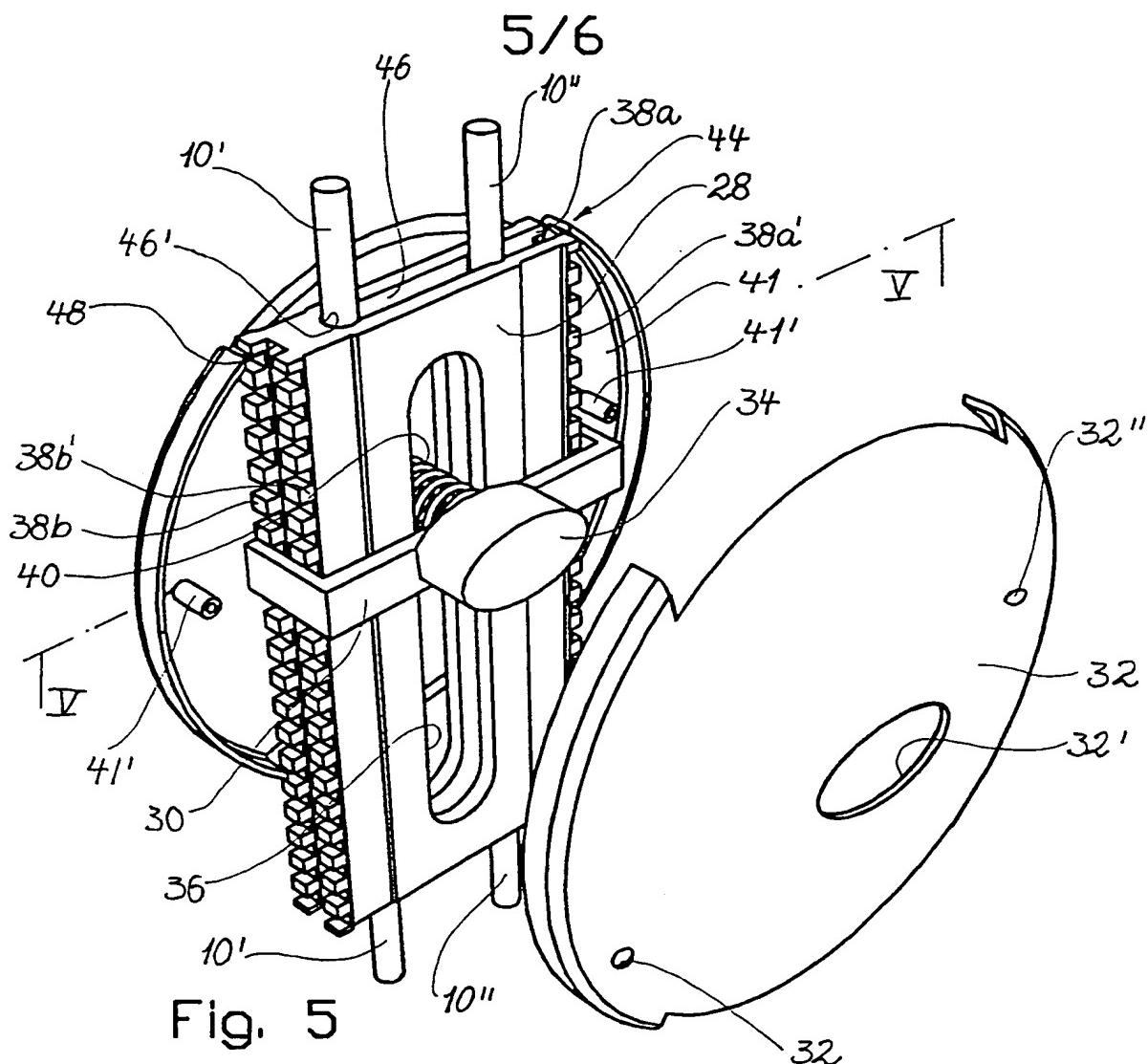
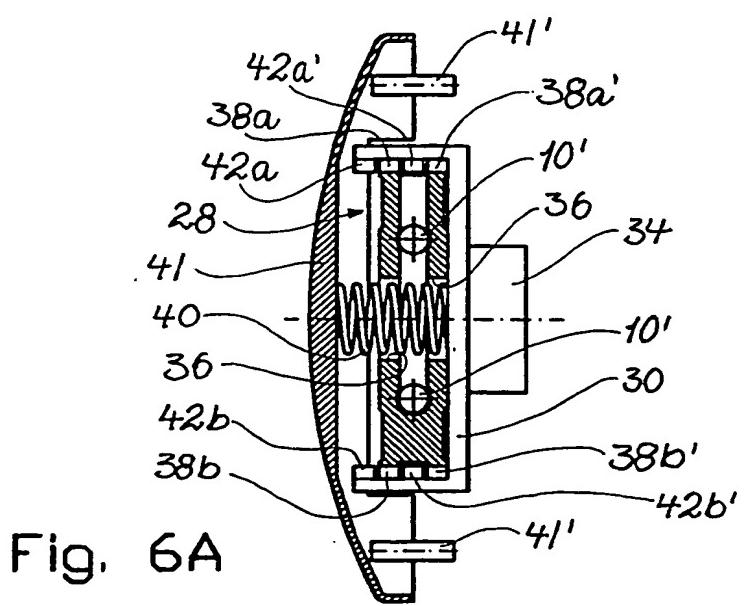
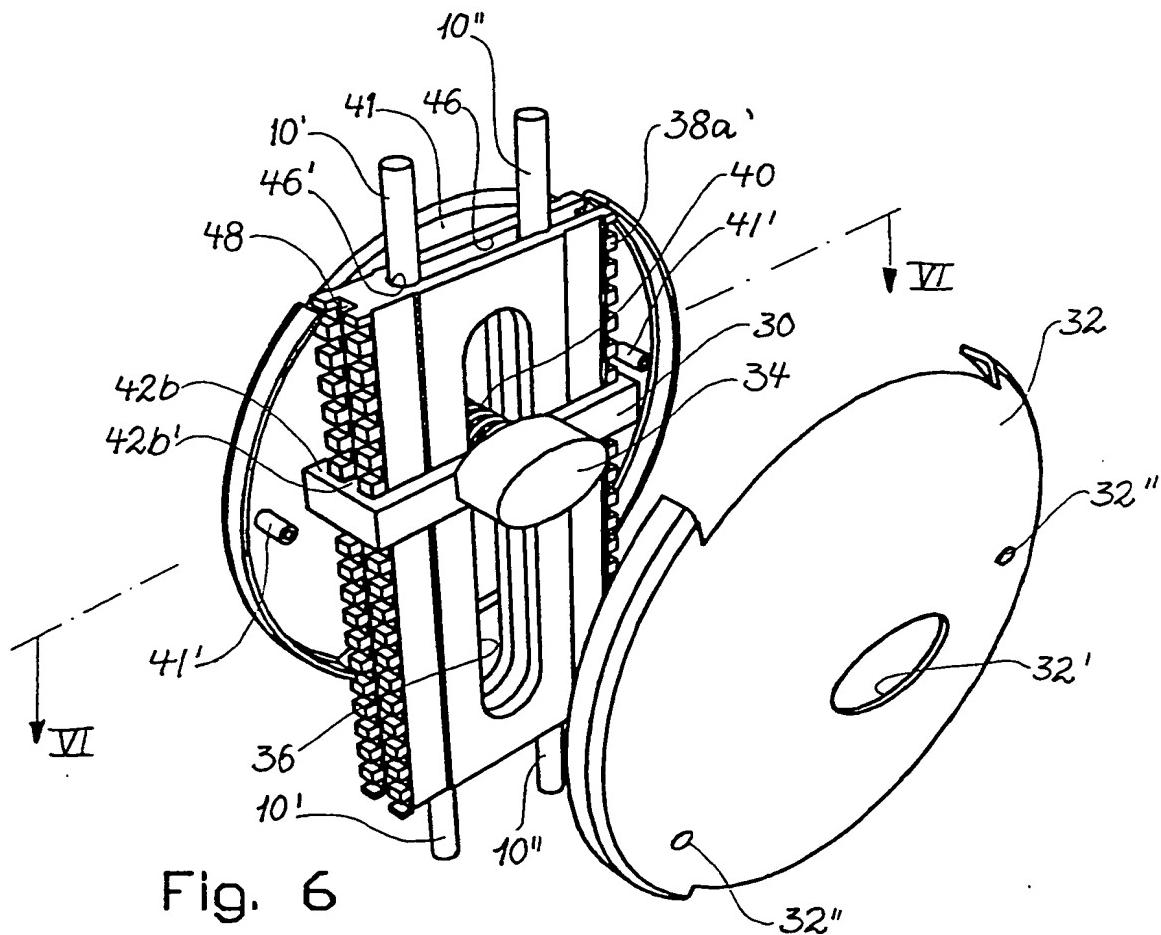


FIG. 4



6/6



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WO 01/23239 A1



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

| |
|--|
| International application No. PCT/NO 00/00319 |
|--|

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: B62B 3/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: B62B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 5651557 A (DE STEFANO), 29 July 1997 (29.07.97) -- | 1 |
| A | US 4867464 A (COOK), 19 Sept 1989 (19.09.89) -- | 1 |
| A | GB 2282572 A (REGENT MOULDINGS LIMITED), 12 April 1995 (12.04.95) -- | 1 |
| A | US 5636818 A (EDWARDS ET AL), 10 June 1997 (10.06.97) -- | 3 |

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
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"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the international search

Date of mailing of the international search report

18 December 2000

10-01-2001

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/NO 00/00319

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| A | US 5086960 A (SCHWIETZER), 11 February 1992 (11.02.92) -- ----- | 3 |

INTERNATIONAL SEARCH REPORT
Information on patent family members

04/12/00

International application No.
PCT/NO 00/00319

| Patent document cited in search report | Publication date | Patent family member(s) | | Publication date |
|--|------------------|-------------------------|--|------------------|
| US 5651557 A | 29/07/97 | NONE | | |
| US 4867464 A | 09/09/89 | NONE | | |
| GB 2282572 A | 12/04/95 | GB 9318351 D | | 00/00/00 |
| US 5636818 A | 10/06/97 | NONE | | |
| US 5086960 A | 11/02/92 | NONE | | |

PCT**REQUEST**

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

International Application No. **PCT/NO 00 00319**International Filing Date **28 SEPT. 2000 (28.09.00)**Name of receiving Office **Patent Office - International Application**Applicant's or agent's file reference
(if desired) (12 characters maximum) **P 8935****Box No. I TITLE OF INVENTION****Device for child seat in a shopper trolley****Box No. II APPLICANT**

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

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 This person is also inventor.

Telephone No.

Facsimile No.

Teleprinter No.

State (that is, country) of nationality:
NORWAYState (that is, country) of residence:
NORWAY

This person is applicant for the purposes of: all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

**CRUICKSHANK, Arve
Trollvik
N-9300 FINNSNES
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This person is:

 applicant only applicant and inventor inventor only (If this check-box is marked, do not fill in below.)State (that is, country) of nationality:
NORWAYState (that is, country) of residence:
NORWAY

This person is applicant for the purposes of: all designated States all designated States except the United States of America the United States of America only the States indicated in the Supplemental Box

 Further applicants and/or (further) inventors are indicated on a continuation sheet.**Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: agent common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

**HÅMSØ PATENTBYRÅ ANS
Eivind Håmsø, Odd Skjæveland, Gunnar Håmsø,
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Facsimile No.

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Teleprinter No.

Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Box No.V DESIGNATION OF STATES

The following designations are hereby made under Rule 4.9(a) (mark the applicable check-boxes; at least one must be marked):

Regional Patent

- AP ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, MZ Mozambique, SD Sudan, SL Sierra Leone, SZ Swaziland, TZ United Republic of Tanzania, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT
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- EP European Patent: AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, IT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT
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- | | | |
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| <input checked="" type="checkbox"/> AG Antigua and Barbuda | <input checked="" type="checkbox"/> LK Sri Lanka | |
| <input checked="" type="checkbox"/> AL Albania | <input checked="" type="checkbox"/> LR Liberia | |
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| <input checked="" type="checkbox"/> AT Austria and Utility Model | <input checked="" type="checkbox"/> LT Lithuania | |
| <input checked="" type="checkbox"/> AU Australia | <input checked="" type="checkbox"/> LU Luxembourg | |
| <input checked="" type="checkbox"/> AZ Azerbaijan | <input checked="" type="checkbox"/> LV Latvia | |
| <input checked="" type="checkbox"/> BA Bosnia and Herzegovina | <input checked="" type="checkbox"/> MA Morocco | |
| <input checked="" type="checkbox"/> BB Barbados | <input checked="" type="checkbox"/> MD Republic of Moldova | |
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| <input checked="" type="checkbox"/> BR Brazil | <input checked="" type="checkbox"/> MK The former Yugoslav Republic of Macedonia | |
| <input checked="" type="checkbox"/> BY Belarus | <input checked="" type="checkbox"/> MN Mongolia | |
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| <input checked="" type="checkbox"/> CA Canada | <input checked="" type="checkbox"/> MX Mexico | |
| <input checked="" type="checkbox"/> CH and LI Switzerland and Liechtenstein | <input checked="" type="checkbox"/> MZ Mozambique | |
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| <input checked="" type="checkbox"/> CR Costa Rica | <input checked="" type="checkbox"/> NZ New Zealand | |
| <input checked="" type="checkbox"/> CU Cuba | <input checked="" type="checkbox"/> PL Poland | |
| <input checked="" type="checkbox"/> CZ Czech Republic and Utility Model | <input checked="" type="checkbox"/> PT Portugal | |
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| <input checked="" type="checkbox"/> KP Democratic People's Republic of Korea | Check-box reserved for designating States which have become party to the PCT after issuance of this sheet: | |
| <input checked="" type="checkbox"/> KR Republic of Korea | <input checked="" type="checkbox"/> | |
| <input checked="" type="checkbox"/> KZ Kazakhstan | | |

Precautionary Designation Statement: In addition to the designations made above, the applicant also makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designation(s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit. (Confirmation (including fees) must reach the receiving Office within the 15-month time limit.)

Box No. VI PRIORITY CLAIM

 Further priority claims are indicated in the Supplemental Box.

| Filing date of earlier application (day/month/year) | Number of earlier application | Where earlier application is: | | |
|---|----------------------------------|----------------------------------|--|--|
| | | national application: country | regional application: regional Office | international application: receiving Office |
| item (1) (29.09.99) 29 September 1999 | 19994728 | Norway | | |
| item (2) | | | | |
| item (3) | | | | |

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (only if the earlier application was filed with the Office which for the purposes of the present international application is the receiving Office) identified above as item(s): (1)

* Where the earlier application is an ARIPO application, it is mandatory to indicate in the Supplemental Box at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed (Rule 4.10(b)(ii)). See Supplemental Box.

Box No. VII INTERNATIONAL SEARCHING AUTHORITY

Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year)

Number

Country (or regional Office)

ISA / SE

Box No. VIII CHECK LIST; LANGUAGE OF FILING

This international application contains the following number of sheets:

| | | |
|---|---|-------|
| request | : | 3 |
| description (excluding sequence listing part) | : | 9 |
| claims | : | 3 |
| abstract | : | 1 |
| drawings | : | 6 |
| sequence listing part of description | : | _____ |
| Total number of sheets : | | 22 |

This international application is accompanied by the item(s) marked below:

1. fee calculation sheet
2. separate signed power of attorney
3. copy of general power of attorney; reference number, if any:
4. statement explaining lack of signature
5. priority document(s) identified in Box No. VI as item(s):
6. translation of international application into (language):
7. separate indications concerning deposited microorganism or other biological material
8. nucleotide and/or amino acid sequence listing in computer readable form
9. other (specify): Copy of Off. Action of 25.04.00 and

22.09.00

Figure of the drawings which should accompany the abstract: 3

Language of filing of the international application: Norwegian

Box No. IX SIGNATURE OF APPLICANT OR AGENT

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

HÅMSØ PATENTBYRÅ ANS

Gunnar Håmsø

For receiving Office use only

1. Date of actual receipt of the purported international application:

28 SEPT. 2000 (23.09.00)

3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:

4. Date of timely receipt of the required corrections under PCT Article 11(2):

5. International Searching Authority (if two or more are competent): ISA / SE

6. Transmittal of search copy delayed until search fee is paid.

2. Drawings:

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1/6

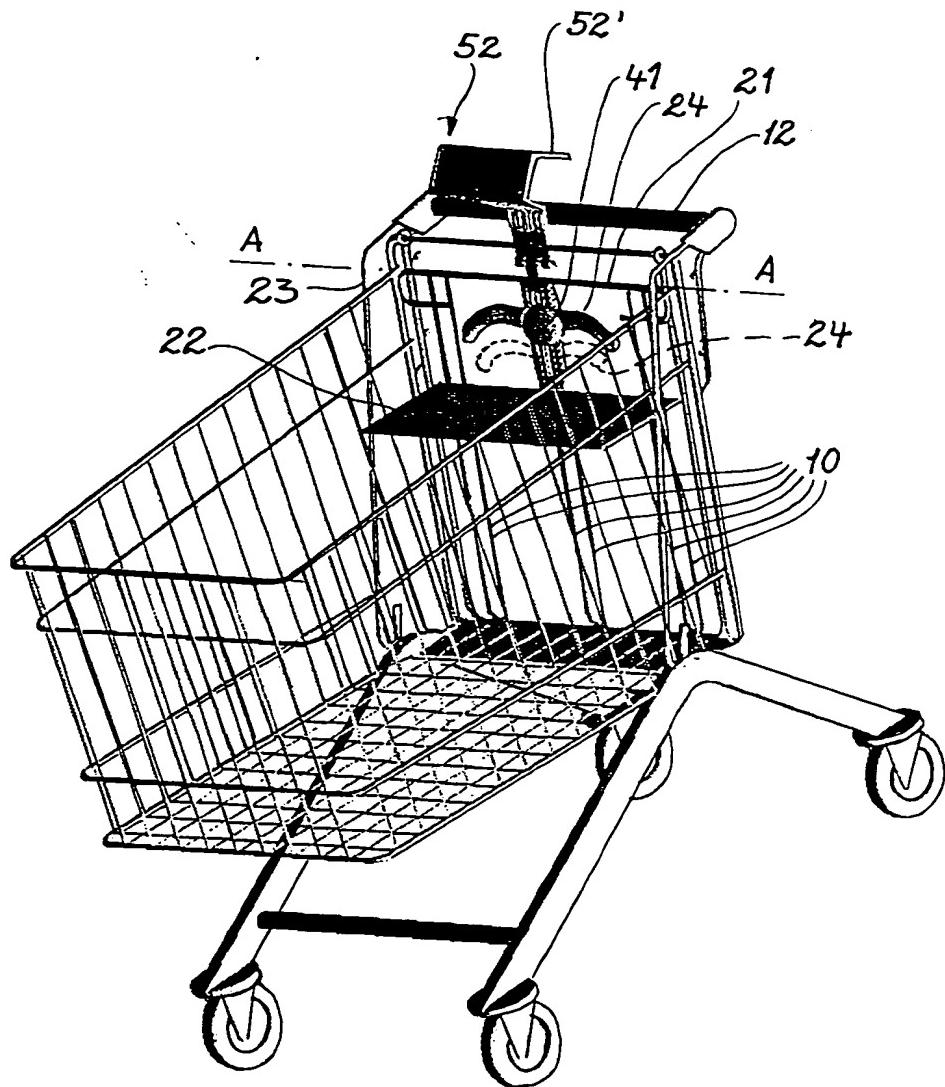


FIG. 1

2/6

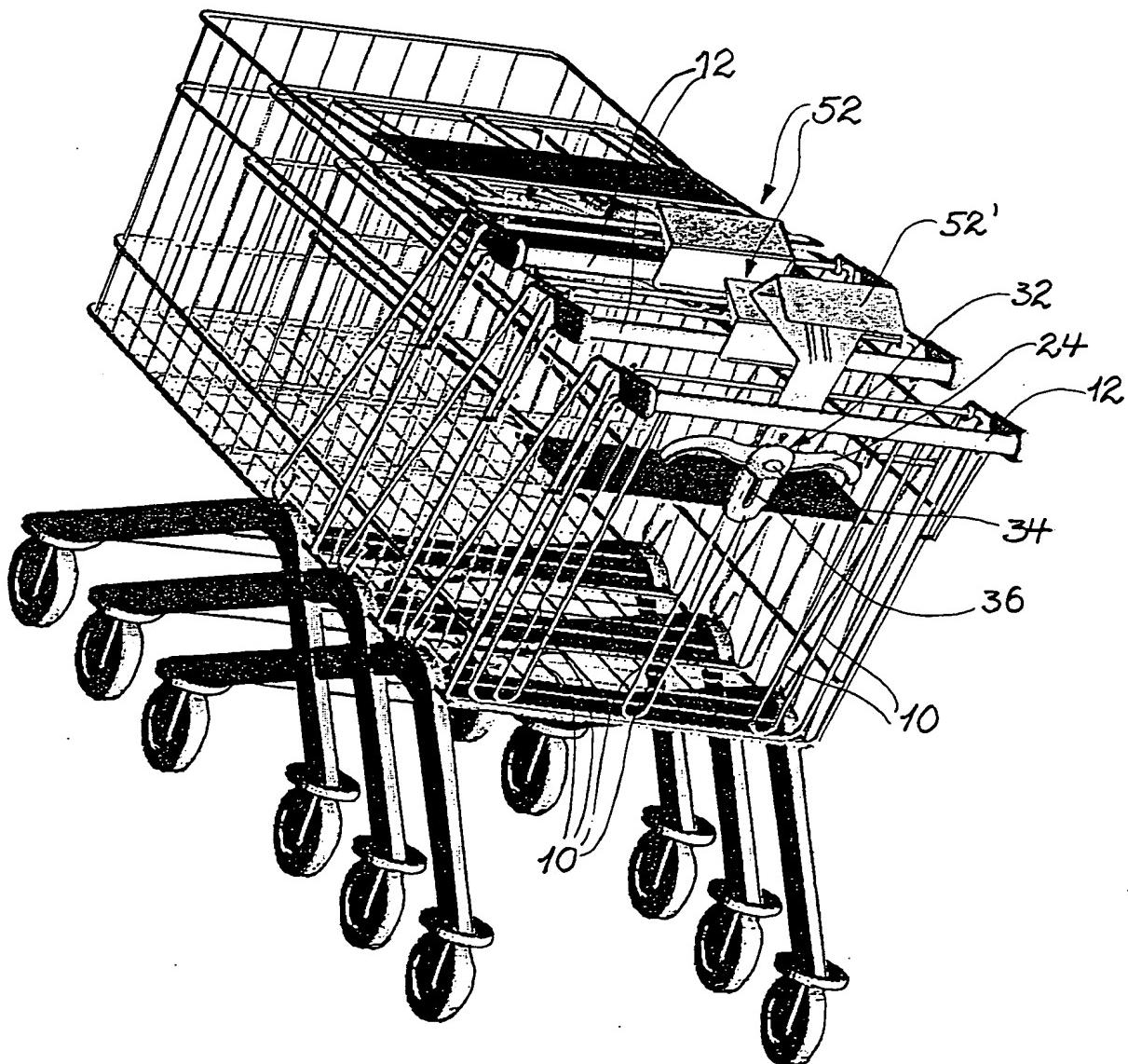


FIG.2

3/6

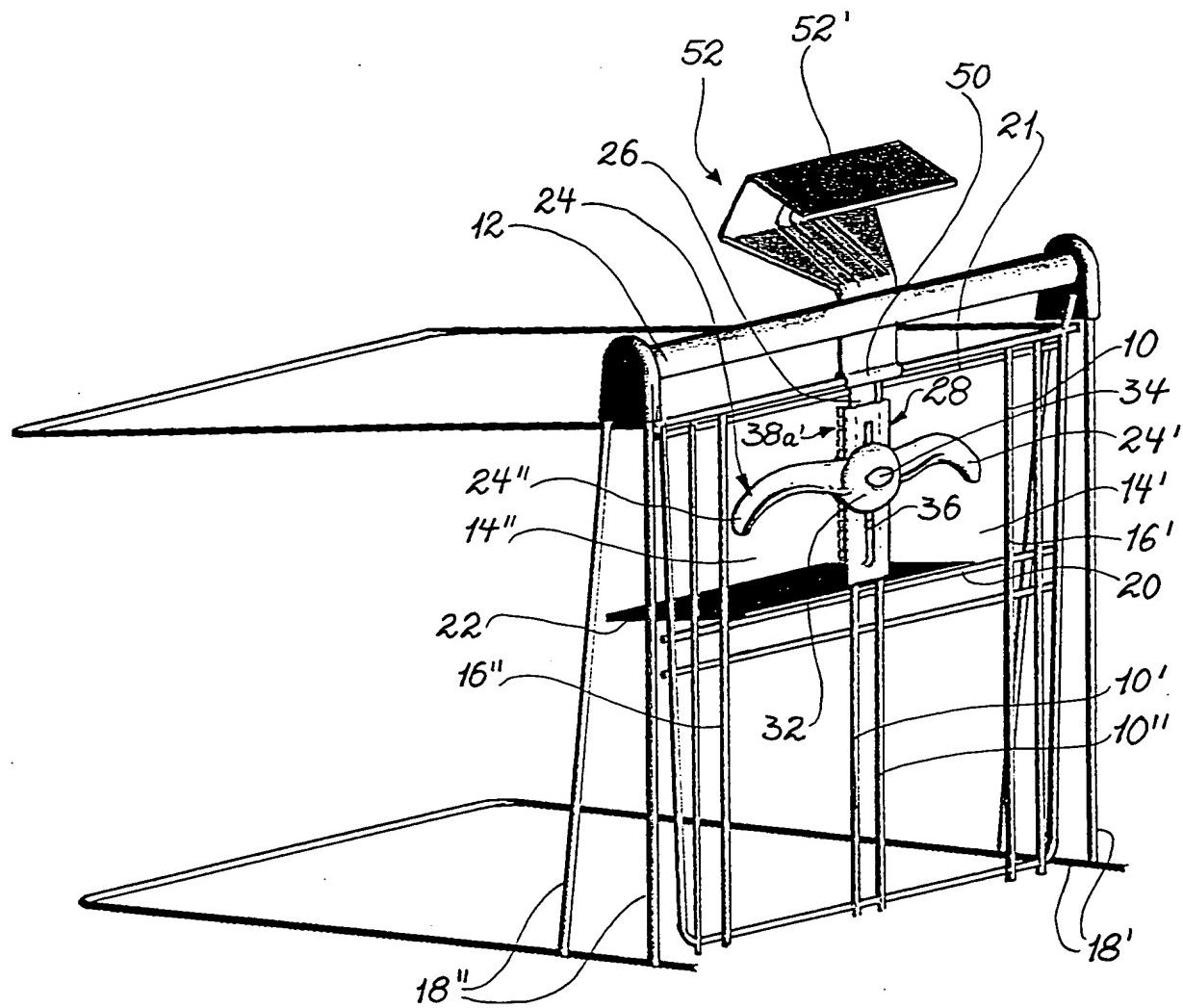


FIG. 3

4/6

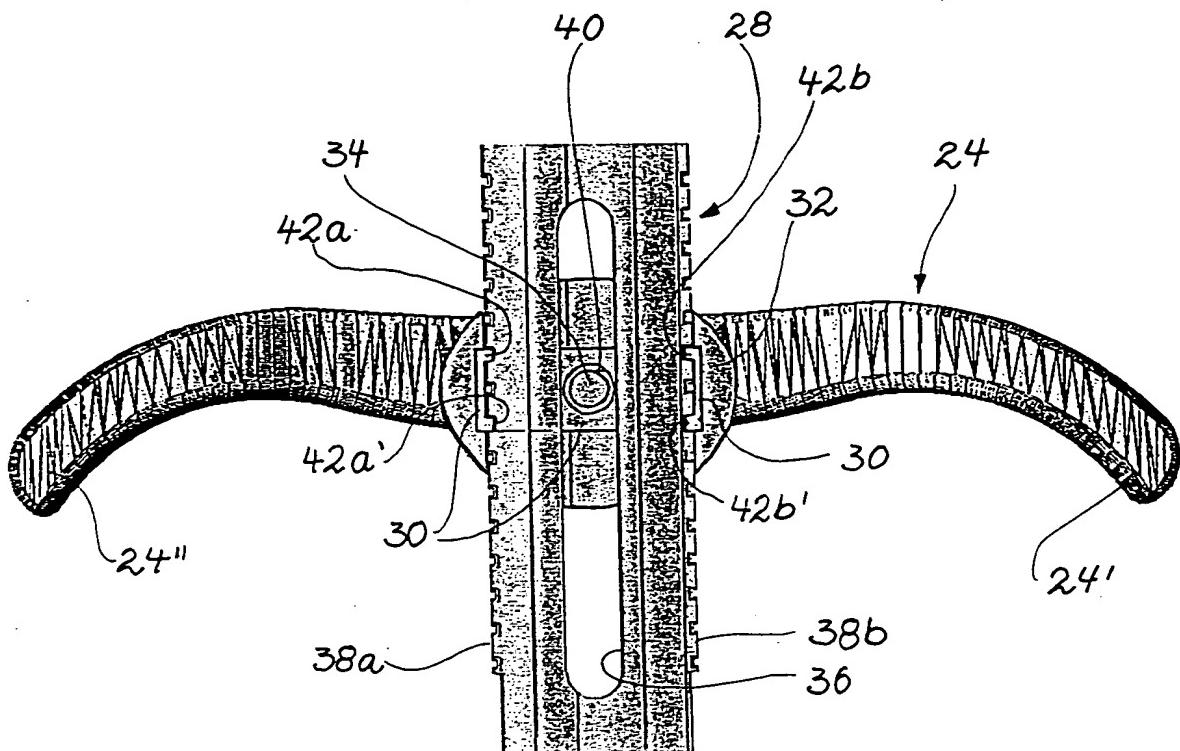
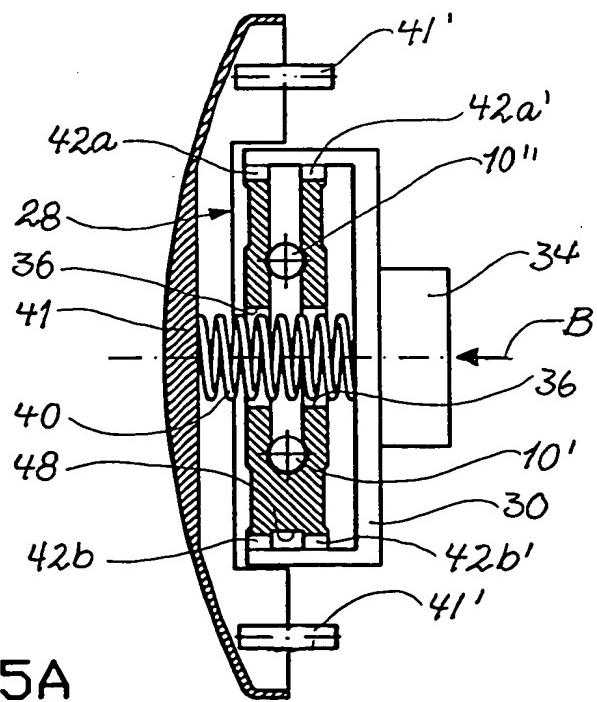
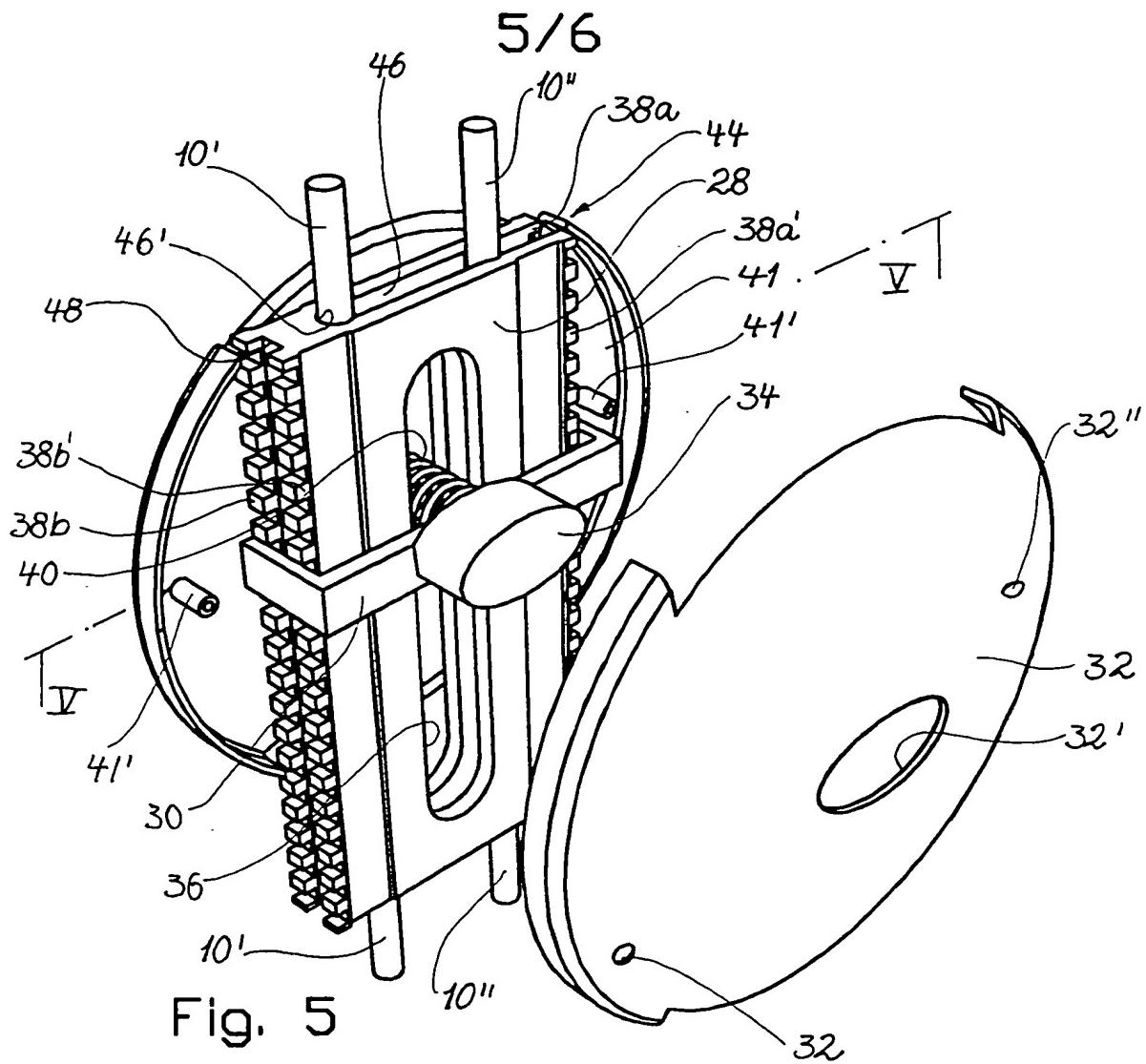
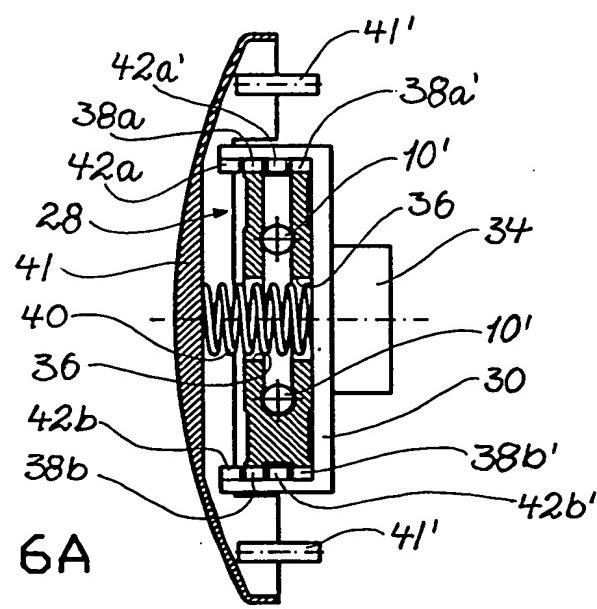
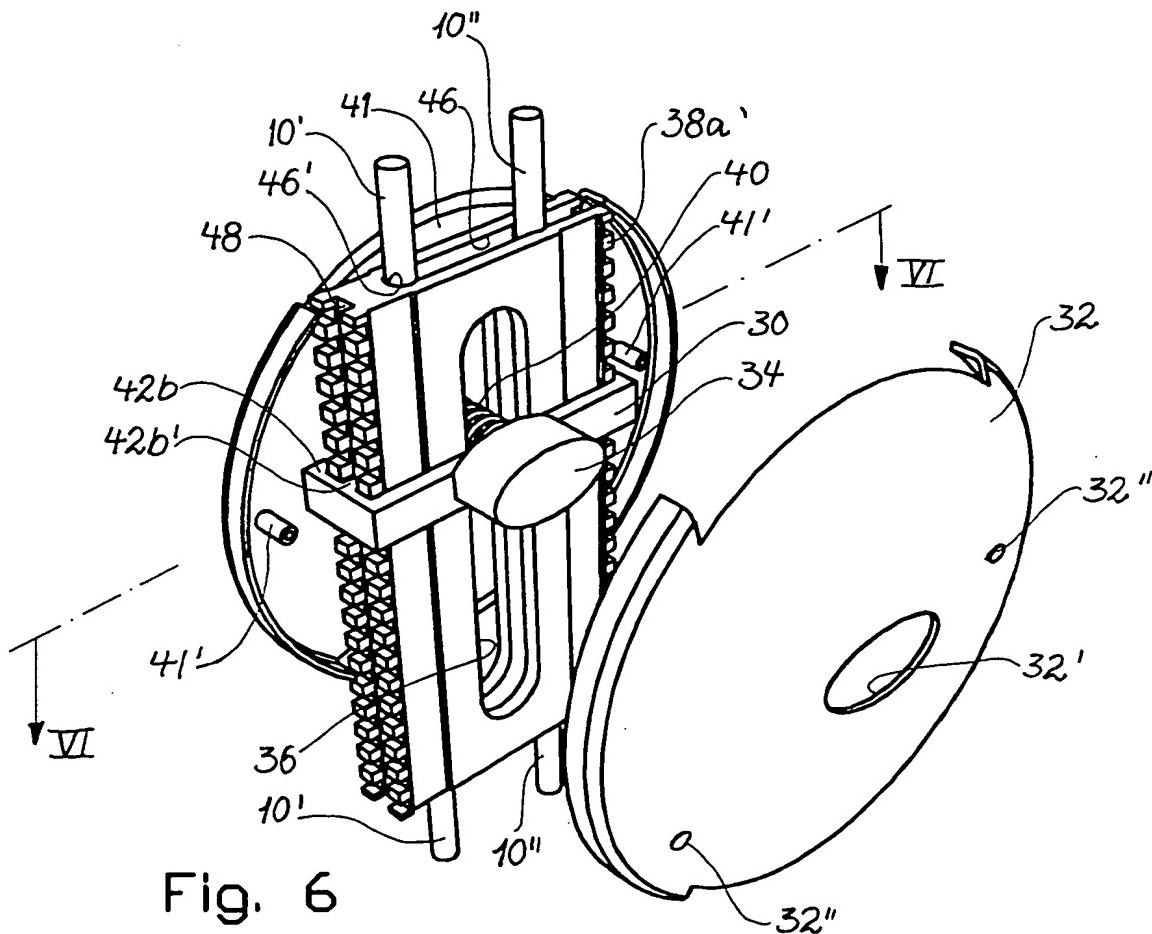


FIG. 4



6/6



ANORDNING VED BARNESETE I HANDLEVOGN

Denne oppfinnelse vedrører en anordning ved barnesetet i handlevogn, hvor barnesetet er svingbart opphengt i området for vognens håndtaksbøyle slik at gjennomgående åpninger i
5 det tilgrensende endestykket danner gjennomføringer for barnets ben når barnesetet er svingt inn i vognen til tilnærmet horizontal stilling, og hvor handlevognen fortrinnsvis er av den type som er delvis innskyvbar i andre handlevogner via en oppsvingbar endevegg for å oppnå stabling i horizontalretningen.
10

Barneseter av angjeldende art er ikke sikre, idet barnet ved å snu seg forholdsvis lett får den ene fot opp ovenpå setet, hvorfra det er lett å reise seg opp til stående stilling, eller barnet blir liggende på kne ovenpå setet. Slike situasjoner kan lett føre til at barnet faller i gulvet. Det har forekommet dødsulykker og alvorlige ulykker med varige mèn som resultat som følge av fall fra handlevognens barnesete.
15

Gjennomføringsåpningene i handlevognens endestykke nærmest skyvehåndtaksbøylen/-tverrstangen kan ikke innsnevres som
20 sådanne, fordi dette ville vanskeliggjøre, eventuelt umulig gjøre, plasseringen av et barns ben igjennom åpningene. Disse

permanente passasjer bør derfor være vide og rommelige innstikkåpninger, som barnets ben lett kan føres inn igjennom og senere trekkes ut av.

- Ifølge den foreliggende oppfinnelse er det derfor tilveie-
5 brakt en sikringsinnretning i form av et høyderegulerbart tverrgående legeme som, når barnets ben er stukket igjennom handlevognendestykrets gjennomføringsåpninger, føres ned fra en øvre, virksom beredskapsstilling til en nedre, virksom sikringsstilling hvor sikringslegemet ovenfra innsnevrer bar-
10 nebenenes gjennomføringsåpninger i høyderetningen. Når dette sikringslegemet befinner seg i én virksom, nedre sikringspo-
sisjon kan denne svare til én av en rekke ulike høydeposisjo-
ner, avhengig av tykkelsen på barnets lår. Sikringslegemet er således høyderegulerbart og fikserbart på innstilt nivå.
- 15 Ifølge en særlig fordelaktig utførelsesform av oppfinnelsen bærer rammen for sikringsbøylens opphengning øverst en plate-
lignende holder som kan være formtilbøyd av for eksempel transparent plastmateriale. I virksom stilling, det vil si når handlevognen ikke befinner seg i stablet stilling, vil
20 denne platelignende holderdels øvre flate være rettet mot den som skyver handlevognen, og holderen kan på kjent måte inne-
holde informasjon og/eller reklame samt være forsynt med en klemme for midlertidig fastholdelse av en handlelapp.
- Denne informasjonsbærer kan alternativt være forbundet dir-
25 ekte med den inn-/oppsvingbare endevegg av handlevognen og kan øverst være avvinklet slik at dens i bruksstillingen skrått nedover/bakover rettede plateformede hoveddel (den informasjonsbærende del) ved endeveggens inn-/oppsvingning blir liggende an mot eller over det tverrgående håndtak.
- 30 Det høyderegulerbare, på ulike nivåer fikserbare sikrings-
element som kan ha klesbøyle lignende form, kan med fordel være festet til n vertikalt forskyvbar og i ulike høydeposi-
sjoner fikserbar sleid som har ett eller flere fremspring

eller lignende inngrepsorganer som griper utløsbart inn i minst én vertikaltrettet tannstang, hvilket inngrep kan oppheves midlertidig når sleiden med sikringselementet forflyttes opp eller ned i høydereguleringsøyemed. Sleiden med sikringselementet og fremspringet/fremspringene/inngrepsorganene er fortrinnsvis forspent mot en stilling for opprettelse og opprettholdelse av inngrepet med tannstang/-stenger i innstilt høydeposisjon, fortrinnsvis ved hjelp av en skruefjær som er innspent mellom sleiden og et motholdsorgan som er ubevegelig i fjærrens fjøringsretninger (akseretning) men forskyvbart opp og ned i sleidens forskyvningsretninger, hvilken skruefjær strekker seg vinkelrett på tannstangens/-stengenes lengderetning. Ved å utsette sleiden med sikringselementet sentralt for en trykkraft rettet motsatt skruefjærrens utføringsretning og i fjærrens akseretning, trykkes fjæren sammen og forspennes, samtidig som sleidens ene eller flere fremspring bringes sideveis ut av inngrep i respektive tannluke eller -luker i tannstangen/-stengene, hvorved minst ett fremspring havner i et vertikalt føringsspor.

Med sleidens fremspring glidende forskyvbart i føringssporet kan sleiden med sikringselementet føres opp eller ned med sleiden i inntrykket tilstand mot trykkfjærrens virkning inntil ønsket høydeposisjon for sikringselementet er oppnådd.

Sikringselementets virksomme høydeposisjon vil normalt være avhengig av barnets lårtykkelse. Når barnet skal fjernes fra barnesetet, trykkes sleiden med sikringselementet inn mot trykkfjærrens virkning slik at nevnte fremspring bringes ut av inngrep med en tannluke i respektive tannstang/-stenger og havner i det vertikale føringsspor, for oppskyving av sleid med sikringselement til uvirk som beredskapsstilling.

Ytterligere formål, fordeler og trekk ved oppfinnelsen vil fremgå av etterfølgende beskrivelse av et ikke-begrensende eksempel på en foretrukket utførelsesform som er illustrert på medfølgende tegninger, hvor:

Fig. 1 viser i perspektivriss en handlevogn hvor sikringsbøylen med fullt opptrukne linjer er vist i sin øvre, uvirkssomme beredskapsstilling og med stiplede linjer i én nedre, virksom stilling;

- 5 Fig. 2 viser i perspektiv tre stablebare handlevogner som er stablet delvis inne i hverandre i horisontalretningen;

Fig. 3 viser et delriss av en handlevogn i perspektiv, hvor handlevognens "kurv" er sterkt forenklet;

- 10 Fig. 4 viser et frontriss av sikringsinnretningen separat og hvor det tverrgående sikringselement har avrundede, nedoverrettede endepartier;

Fig. 5, 5A og 6, 6A viser perspektiviske delriss og illustrerer, sett skrått ovenfra, en enkel høydereguleringsinnretning for sikringselementet (ikke vist), hvor:

- 15 Fig. 5 viser den sikringselement-bærende sleids fremspring i inngrep i stasjonære sikringselement-stillingsfikserende, stasjonære, vertikale tannstenger med mellomliggende føringspor for glidbar opptagelse av fremspring på den sikringselement-bærende sleid for sikringselementets forflytting i 20 høyderetningen;

Fig. 5A er et tverrsnitt etter linjen V - V i fig. 5;

- Fig. 6 svarer i alt vesentlig til fig. 5, men her er sleidens fremspring brakt ut av inngrep i tannluker i de vertikale tannstenger, idet ett av de synlige fremspring derved er posisjonert i det mellom de to i et tannstangpar inngående tannstenger beliggende, vertikalt føringsspor, for sleidens forflytting opp eller ned i forhold til den i fig. 6 viste posisjon; og

Fig. 6A er et snitt etter linjen VI - VI i fig. 6.

Det henvises til fig. 1 - 3, hvor den viste handlevogn har en endevegg 10 ved en tverrgående håndtaksstang 12. Som det fremgår tydeligere av fig. 3, omfatter endeveggen 10 to midtre i det vesentlige vertikale, stang- eller rørformede elementer 10', 10" som hvert avgrenser en gjennomgående barnebensinnstikkingsåpning 14' og 14" sammen med et tilstøtende, dermed parallelt element 16', 16" i nærheten av handlevognens sidevegger som representeres ved elementer 18', 18" og et horisontalt element 20 som inngår i endeveggen 10.

I tilknytning til disse gjennomgående innstikkingsåpninger 14' og 14" for et barns ben, er det i endeveggen 10 og en i forhold til denne bevegelig ramme 23, se særlig fig. 1, svingbart opphengt et kjent Barnesete 22 som i virksom stilling har en i det vesentlige horisontal stilling, slik som vist, og en ikke vist, i det vesentlige vertikal, uvirksom stilling når rammen 23 er svingt inn til endeveggen 10. Den svingbare opphengning av dette Barnesete 22 er velkjent og er derfor ikke detaljert vist.

Endeveggen 10 er ved sin øvre kant svingbart opphengt om en horisontal akse, (antydet ved lengdeaksen A-A for tverrstan- gen 21 i fig. 1), slik at den kan svinges opp når handlevogner stables, delvis skjøvet inn i hverandre i horisontalretningen, fig. 2. Under rammens 23 forutgående svingning mot endeveggen 10 svinges Barnesetet 22 til sin uvirksomme stilling parallelt med ramme 23 og endevegg 10, slik at det ikke griper forstyrrende inn i stablingen.

I overensstemmelse med den foreliggende oppfinnelse er det sentralt i angeldende endeveggs øvre parti anordnet en Barnesikringsinnretning 24 som i prinsippet skal samvirke åpningsinnsnevrende med det tverrgående element 20 i endeveggen 10, for å snevre inn disse gjennomgående åpninger 14',

14" etter at barnet har stukket benene igjennom åpningene og sitter trygt på setet 22.

Barnesikringsinnretningens virksomme element 24 er bøyleformet og strekker seg i hovedsak parallelt med handlevognens
5 endevegg samt har nedadrettede endepartier 24', 24" som hvert slutter seg til det tverrgående hovedlegeme ved et oppad/utad konvekst avrundet overgangsparti.

Det bøyleformede sikringselement 24 er opphengt i endeveggens 10 øvre parti, for eksempel i den tverrgående stang 21.

10 Til endeveggens 10 midtre stang-/rørformede elementer 10', 10" er stift fastgjort den stasjonære del 28 av sikringselementets 24 høydereguleringsinnretning.

Til handlevognens rammestativrør eller lignende er øverst, ved endeveggen, på ikke nærmere vist måte, sentralt festet en
15 nedhengende, smal, avlang plate 26.

Denne stasjonære del 28 av høydereguleringsinnretningen for sikringselementet 24 samvirker med høydereguleringsinnretningens vertikalt forskyvbare, i innstilt høydestilling fikserbare sikringselement-bærende element i form av en i horisontalrikk rettvinklet U-formet sleid 30.
20

Henvisningstallet 32 betegner et fastgjøringshode for sikringselementets 24, idet 34 angir en betjeningsknott som er anordnet i et sentralt hull 32' i fastgjøringshodet 32.

Fig. 4 viser at den stasjonære del 28 av sikringselementets 25 høydereguleringsinnretning 28, 30 har motsatt rettede tannstenger 38a, 38b. Av fig. 5, 5A og 6, 6A går det frem at hver av disse tannstenger omfatter et tannstangpar 38a, 38a' og 38b, 38b'.

Sikringselementhodets 32 betjeningsknott 34 er tilkoplet den ene ende av en sentralt anordnet trykkfjær i form av en skruefjær 40 hvis annen ende er festet sentralt i et skålformet glidestykke 41 med festeorganer i form av to innvendig gjengede hylser 41' for mottagelse av skruer (ikke vist) som skrues inn i hylsene 41' igjennom hull 32'' i fastgjøringshodet 32, slik at delene 32 og 41 er ubevegelige vinkelrett på endeveggsrørenes 10', 10'' lengderetning men, forskyvbare i nevnte lengderetning, slik at nevnte skålformede glidestykke 41 vil danne mothold for fjæren 40 ved denne sammentrykking som følge av inntrykking av betjeningsknotten 34.

Av fig. 4, 5, 5A, 6, 6A vil det fremgå at sleiden 30 er forsynt med fire, parvis mot hverandre rettede fremspring 42a, 42a' og 42b, 42b' som i fiksert høydeposisjon for sikringselementet 24, fig. 4 og 5, griper inn i tannstengenes 38a, 38a', 38b, 38b' respektive tannluker.

Ved å trykke sikringselementets 24 betjeningsknott 34 i fastgjøringshodets 32 sentrale hull 32' inn for sammentrykking og spenning av fjæren 40, hvorved fjærens 40 glidestykke 41 virker som mothold og derved muliggjør fjærens 40 sammentrykking, bringes sleidens 30 fremspring 42a, 42a', 42b, 42b' ut av inngrep med tannstengenes 38a, 38a', 38b, 38b' luker, fig. 5A, 6 og 6A, hvorunder trykkfjærens 40 glidestykke 41 sammen med fastgjøringshodet 32 og sleiden 30 kan forskyves opp eller ned i høyderetningen.

Betjeningsknottens 34 innskyvningsretning er antydet ved B i fig 5A. Inntrykkingsdybden svarer i det vesentlige til bredden på en tann eller et fremspring 42a, 42a', 42b, 42b', hvilket fremgår ved en sammenholdelse av fig. 5A og 6A.

Den i tilkoplet bruksstilling stasjonære del 28 av sikringselementets 24 høyderegulerings- og fikseringsanordning 28,30 er ifølge fig. 5 og 6 utformet som en U-klemme, altså med et langstrakt, flatklemt horisontalt tverrsnitt med en innfø-

ringsåpning 44 mellom de vertikale tannstenger 38a, 38a' og hvorfra en vertikalt gjennomgående spalte 46 strekker seg over mesteparten av delens 28 horisontale dimensjon samt ender i et avrundet indre parti 46'. En slik U-klemmeformet del 5 28 kan tres/klemmes inn på handlevognendeveggens 10 to midtre stang- eller rørformede elementer 10', 10" og spennes fast til disse.

Mellom tannstengene 38b og 38b' i tannstangparet 38b, 38' er det utformet et vertikalt føringsspor 48 for sleidens 30 ene 10 fremspring 42b', mens det annet fremspring 42b glir i anlegg mot utsiden av tannstangen 38b' når sleiden 30 med sikringselementet 24 forskyves opp eller ned, og fjæren 40 er trykket sammen. Tannstengene 38a og 38a' i tannstangparet 38a, 38a' vil i bruksstilling i fastspent posisjon inneslutte et motsvarende, vertikalt føringsspor som utgjøres av innføringsåpningen 44.

Det klesbøyleformede sikringselementet 24 med to nedover konkavt formede armer 24', 24" vil i hovedsak komme til lett anlegg mot barnets lår, slik barnet ikke kan reise seg opp når 20 sikringselementet 24 er innstilt i korrekt høydeposisjon.

Den nevnte øvre plates 26 øvre ende er forbundet med en holderdel 50 som festes om det øvre stang-/rørformede element 21 av handlevognens endevegg 10. Holderdelen 50 bærer en såkalt informasjonsbærer 52 for reklame etc. hvis virksomme flate 25 52' ovenfra er rettet skrått nedover/bakover, altså mot den som skyver handlevognen foran seg, slik at informasjonen, reklamen etc. er lett synlig for han/henne, uten at vedkommende behøver å ta blikket bort fra barnet som sitter på setet 22, sikret med sikringselementet 24 over lårene, fig. 3.

30 Fig. 2 viser tre delvis inn i hverandre skjøvne handlevogner utstyrt med sikringselement 24 med høyderegulerings- og fiksieringsanordning og informasjonsbærer 52 som dreier sammen

med endeveggen 10 når denne påvirkes av en ny vogn som skyves inn.

Informasjonsbærerens 52 plateformede, ovenfra nedover/bakover ragende hoveddel 52' utgjør en fri, ytre del av et avvinklet 5 eller tilbøyd platelegeme bestående av tre eller fire plateformede partier som er anordnet i en slik vinkel i forhold til hverandre at informasjonsbærerens 52 plateformede hoveddel 52' ved endeveggens 10 inn-/oppsvingning ved handlevognenes stabling i en horisontal rekke, gripende delvis inn i 10 hverandre, fig. 2, ovenfra legger seg an foran det tverrgående håndtak 12. Slike informasjonsbærere 52 kan være forbundet med handlevognens svingbare endevegg 10 direkte eller 15 indirekte via sikringsanordningen.

Oppfinnelsen er ikke begrenset til den viste spesielle høyde-regulerings-/fikseringsanordning for sikringsbøylen 24, idet 15 det kan benyttes andre innbyrdes låsbare/frigjørbare forskyrbare eller teleskopiske anordninger, hvor de enkelte innstilte posisjoner kan sikres trinnvis eller trinnløst. Det kan også anvendes en sikringsbøyle 24 tilordnet en fjær eller en 20 teleskopsylinder som utøver et konstant svakt press over barnets lår.

P a t e n t k r a v

1. Anordning ved barnesete i handlevogn, hvor barnesetet (22) er opphengt i en endevegg (10), som fortrinnsvis er inn-/opp-svingbar i handlevognen om en øvre horisontal akse ved stab-
5 ling av handlevogner i horisontalretningen, og hvor barnese-
tet (22) er plassert i tilslutning til gjennomgående åpninger
(14', 14'') for barnets ben i nevnte endevegg (10) og som av-
grenses nedad og på sidene av elementer (10', 10'', 16', 16'',
20) som inngår i nevnte endevegg (10), karakteri-
10 sert ved at barnesetet (22) i området for endeveggens
(10) nevnte gjennomgående åpninger (14', 14'') for barnets ben
er tilordnet et overliggende, høyderegulerbart og i innstilt
høydepositjon fortrinnsvis fikserbart sikringselement (24)
som ved senking er innrettet til å innsnevre åpningene (14',
15 14'').
2. Anordning ifølge krav 1, karakterisert ved
at nevnte høyderegulerbare og på innstilt nivå fortrinnsvis
fikserbare/ låsbare sikringselement (24) har en klesbøylelig-
nende form bestående av et midtre, i hovedsak tverrgående
20 hovedlegeme (24) som via nedad konkave mellompartier går over
i nedadrettede endepartier (24', 24'').
3. Anordning ifølge krav 1, hvor handlevognen er utstyrt med
en platelignende informasjonsbærer (52), karakteri-
25 sert ved at den platelignende informasjonsbærer (52)
som er direkte eller indirekte forbundet med handlevognens
svingbare endevegg (10), og som i bruksstilling omfatter en
ovenfra skrått bakover rettet hoveddel (52') og en fra dennes
øvre kant skrått forover rettet platedel som er forbundet med
30 bæredelen, utformet og plassert på en slik måte at informa-
sjonsbærerens (52) avvinklete øvre del bestående av nevnte
hoveddel (52') og platedel, ved endeveggens (10) svingning
under to eller flere handlevogners stabling i en horisontal
rekke, svinges slik at nevnte platelignende hoveddel (52')

ovenfra blir liggende an mot eller over det tverrgående håndtak (12).

4. Anordning ifølge krav 3, karakterisert ved at den stasjonære del (28,26) av sikringselementets (24) høyderegulerings-/fikseringsanordning (28,26,30) øverst er forbundet med nevnte informasjonsbærers (52) nedre bæredel.

5. Anordning ifølge krav 3, karakterisert ved at den stasjonære del (28,26) av sikringselementets (24) høyderegulerings- og fikseringsanordning (28,26,30) omfatter i det minste en i det vesentlige vertikal tannstang (38a, 38a', 38b, 38b'), og at sikringselementet (24) er forbundet med en sleid, vogn eller lignende (30) som er forskyvbar i vertikalretningen mellom en øverste, uvirk som beredskapsstilling hvor sikringselementet (24) ikke begrenser nevnte gjennomgående benåpninger (14', 14'') i høyderetningen, og flere underliggende virksomme stillinger hvis høydeposisjon er avhengig av tykkelsen på barnets lår, hvilken sleid (30) er utformet med minst ett fremspring (42a, 42a', 42b, 42b') som i én posisjon av sleiden/sikringselementet i handlevognens lengderetning er innrettet til å kunne gripe inn i en tannluke i nevnte i det minste ene tannstang (38a, 38a', 38b, 38b'), mens det i en annen posisjon av sleiden/sikringselementet i handlevognens lengderetning er skjøvet sideveis ut av nevnte inngrep, hvorved det ikke er noe som hindrer sleidens/sikringselementets (30/24) forskyvning opp eller ned i det vesentlige i vertikalretningen.

6. Anordning ifølge krav 5, karakterisert ved at sleiden (30) med sikringselementet (24) er fjærforspent (40) mot deres ikke-forskyvbare stilling hvor sleidens (30) fremspring (42a, 42a', 42b, 42b') er i inngrep med tannluke/-luker i nevnte tannstang/-stenger (38a, 38a', 38b, 38b').

7. Anordning ifølge krav 6, karakterisert ved at det i området for nevnte tannstang er anordnet et tann-

stangpar (38b, 38b') med et mellomliggende føringsspor (48) for sleidens (30) ene fremspring (42b'), og at sleiden (30) med sikringselementet (24), samvirker med en fjær (40) som søker å holde sleiden (30) i en stilling som betinger dens 5 fremsprings (42a, 42a', 42b, 42b') inngrep i en tannluke i tannstengene (38a, 38a', 38b, 38b').

8. Anordning ifølge krav 7, karakterisert ved at den stasjonære del (28) av sikringselementets (24) høyde-regulerings-/fikseringsanordning som bærer tannstengene 10 (38a, 38a', 38b, 38b'), er utformet som en U-formet klemme med en i horisontal retning langstrakt, vertikalt gjennomgående spalte (46) som strekker seg over mer enn U-klemmens (28) halve bredde (horisontale utstrekning), hvilken U-klemme 15 (28) kan tres/klemmes inn på handlevognens endeveggelmenter (10', 10").

9. Anordning ifølge et hvilket som helst av de foregående krav 7 og 8, karakterisert ved at sleiden (30) i området for hvert tannstangpar (38a, 38a' og 38b, 38b') har to parallelle fremspring (42a, 42a', 42b, 42b') for inn-grep i hver sin tannstang og at tannlukene hver har en lengde 20 som i hovedsak svarer til det mellomliggende føringsspors (44, 48) motsvarende bredde som igjen i hovedsak svarer til sleidens (30) forskyvningsstrekning vinkelrett på tannstenge-nes lengderetning.

Sammendrag

Sikringsanordning i forbindelse med et Barnesete i en handlevogn. Sikringsanordningen forhindrer at et barn som er plassert på setet (22) kan få trukket benene ut av de gjennomgående åpninger som er utformet i handlevognens endevegg (10). Barnesetet (22) er svingbart opphengt i endeveggen (10), som fortrinnsvis er inn-/oppstingbar i handlevognen om en øvre horizontal akse ved stabling av handlevogner i horisontalretningen. Barnesetet (22) er plassert i tilslutning til nevnte gjennomgående åpninger (14', 14") for barnets ben. Åpningene avgrenses nedad og på sidene av elementer (10', 10", 16', 16", 20) som inngår i nevnte endevegg (10). Endeveggens (10) nevnte gjennomgående åpninger (14', 14") for barnets ben er tilordnet et overliggende, høyderegulerbart sikringselement (24) som inngår i nevnte sikringsanordning og som ved senking kan innsnevre nevnte åpninger (14', 14") etter at barnets ben er ført igjennom nevnte åpninger (14', 14") og befinner seg utenfor handlevognen, bakenfor nevnte endevegg (10). Denasjonære del (28) av sikringselementets (24) høydereguleringsanordning kan øverst bære en i og for seg kjent platelignende, avvinklet eller tilbøyd holder (52) for informasjon/reklame etc.

(Fig. 3)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
5 April 2001 (05.04.2001)

PCT

(10) International Publication Number
WO 01/23239 A1(51) International Patent Classification⁷: B62B 3/14

(21) International Application Number: PCT/NO00/00319

(22) International Filing Date:
28 September 2000 (28.09.2000)

(25) Filing Language: Norwegian

(26) Publication Language: English

(30) Priority Data:
19994728 29 September 1999 (29.09.1999) NO

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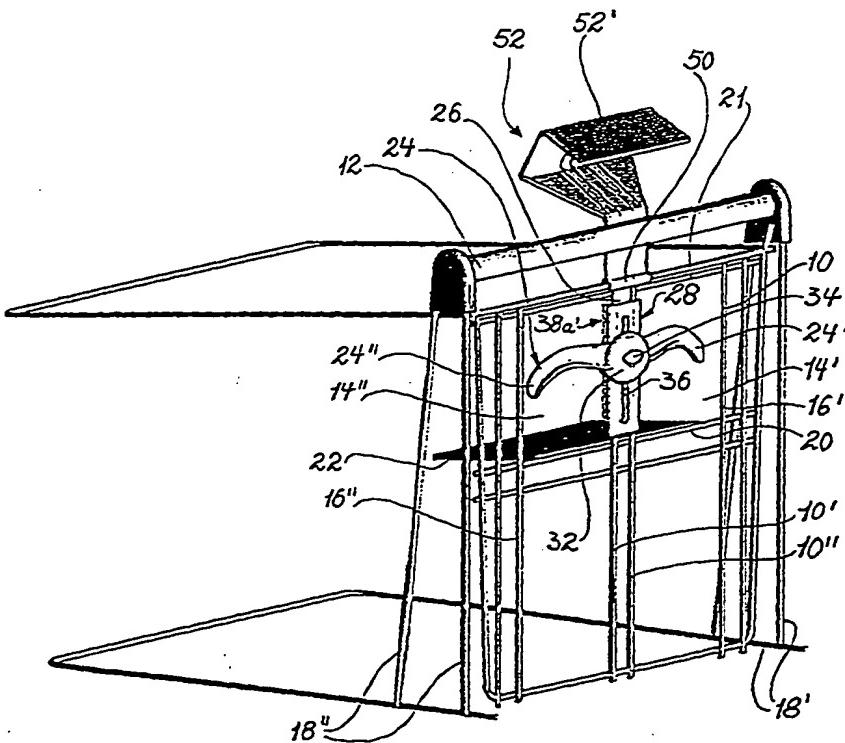
(81) Designated States (national): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:
— With international search report.

[Continued on next page]

(54) Title: DEVICE FOR CHILD SEAT IN A SHOPPER TROLLEY



(57) Abstract: A safety device in connection with a child seat in a shopper trolley. The safety device prevents a child, placed on the seat (22), from being able to pull its legs out of the openings formed through the end wall (10) of the shopper trolley. The child seat (22) is pivotally suspended from the end wall (10), which can preferably be swung inwards/upwards in the shopper trolley about a horizontal axis, when shopper trolleys are being stacked horizontally. The child seat (22) is placed adjacent to said through openings (14', 14'') for the child's legs. At their bottoms and sides the openings are defined by elements (10', 10'', 16', 16'', 20) included in said end wall (10). To said openings (14', 14'') for the child's legs through the end wall (10) there is arranged an above-lying safety element (24), adjustable heightways, which is included in said safety device, and can restrict said openings (14', 14'') when being lowered, after the child's legs have been put through

WO 01/23239 A1

said openings (14', 14'') and are outside the shopper trolley, to the rear of said end wall (10). The stationary part (28) of the height-adjusting device of the safety element (24) may carry, at its top, an angled or bent plate-like support (52), known in itself, for information/advertisements etc.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.